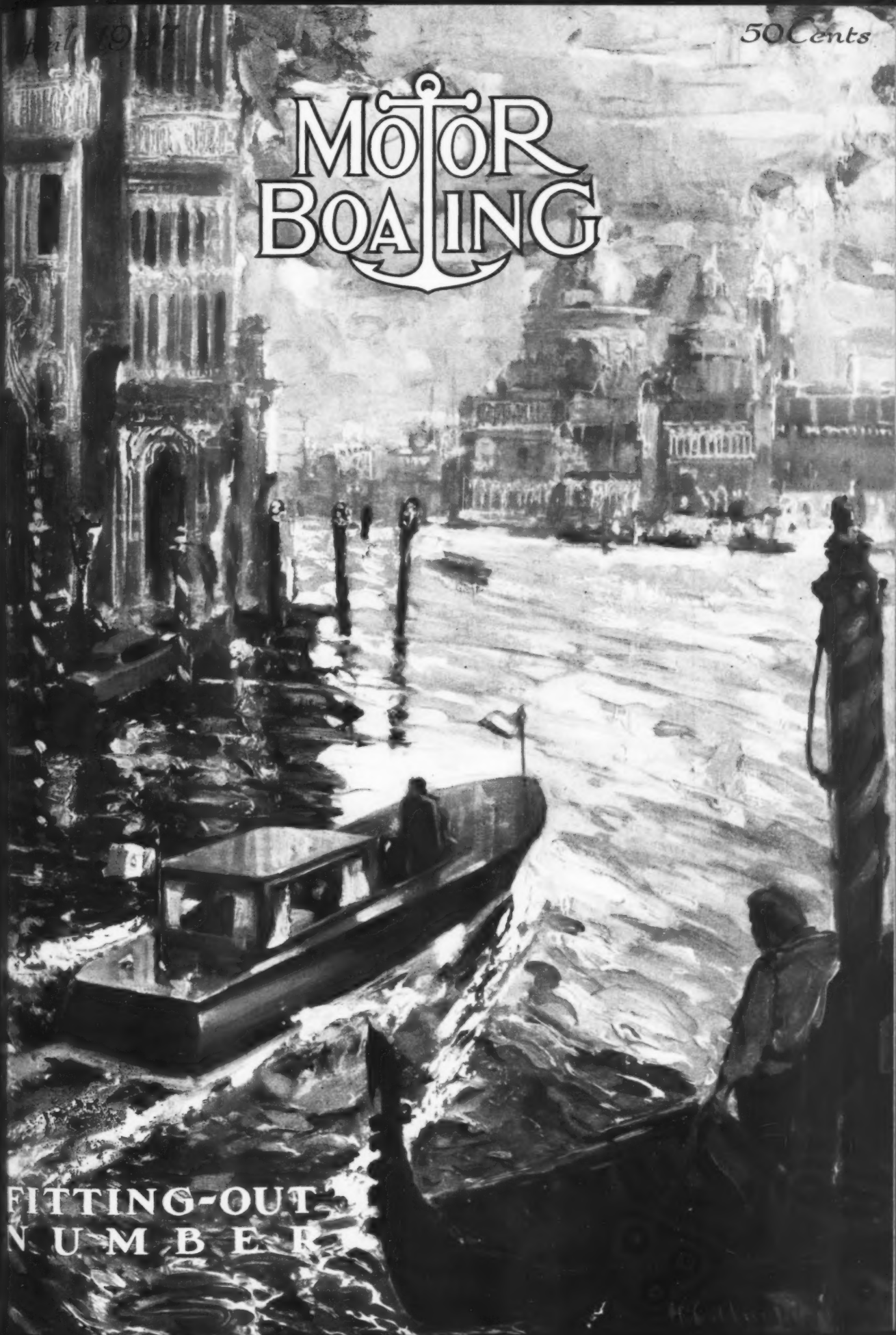


50 Cents

MOTOR BOATING

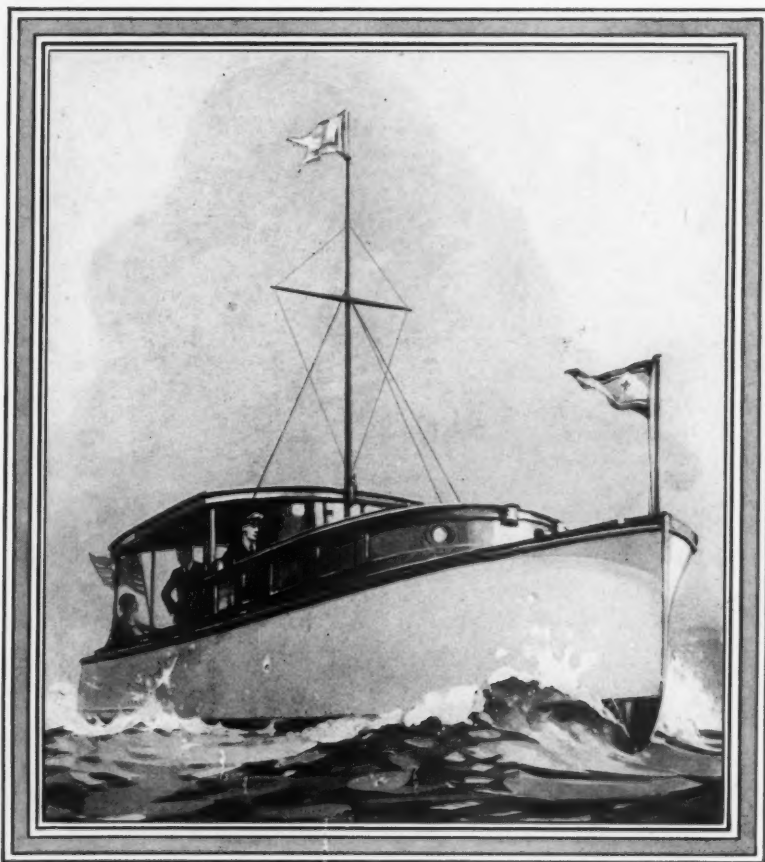
FITTING-OUT
NUMBER



For maximum comfort afloat

Every Elco Cruiser is a real "Home Afloat." On board you will find a well-equipped galley, comfortable berths and all the conveniences to be found ashore . . . everything needed for extended coastwise cruising.

And you will be surprised at the ease with which your boat can be handled. Simple controls and a dependable engine eliminate vexatious cruising problems.



See the 1927 Elco Fleet

Elco Twenty-six Foot Cruiser	. \$2,450
Elco Thirty-four Foot Cruiser	. 5,750
Elco Forty-two Foot Cruiser	. 11,500
Elco Fifty Foot Cruiser . . .	18,500
Elco Sixty-two Foot Motor Yacht	37,500

All prices afloat at Bayonne, N. J.

Orders should be placed now for early Spring delivery. Write for Catalog MG.

PORT ELCO

Park Avenue at 46th Street, New York City—Sales Offices and Motor Boat Exhibit

WATERWAYS ARE NEW HIGHWAYS OF HAPPINESS

These Exclusive Features ~

have given Leadership to Johnson



The Light Single

Hunters, fishermen, favor this model because of its 26-pound weight. Easily transported anywhere. Attaches to row boat or canoe. Ideal for dinghy use. Speed range, 1 to 7 m. p. h., depending upon type of boat used. Priced at **\$115**

The New Light Twin

The tourists', fishermen's and cottagers' motor. Ideal for tender use. The lightest weight twin outboard motor made. Weight, 37 pounds. Speed, 1 to 11 m. p. h., depending upon type of boat used. Priced at **\$140**

The New Standard Twin

An all-purpose motor. For lake and resort cottagers. For racing, planing-type boats, as well as large rowboats. Weight 55 pounds. Speed, 2 to 22 m. p. h., depending upon type of boat used. Priced at **\$185**

The New Big Twin

The ideal motor for small runabouts, Baby Buzz boats, racing hydroplanes, and commercial craft. Weight, 85 pounds. Speed range, 2 to 27 m. p. h., depending upon type of boat used. Priced at **\$210**

THE greatest factor in Johnson leadership has been its combination of exclusive features, which resulted in a degree of performance so smooth, so powerful, so superior that within three short years it made Johnson the world's largest manufacturer of outboard motors.

In the 1927 Models, a material increase in power has been secured. A new four-port motor design has been developed for the Standard and Big Twins which gives a flexibility never before known to outboard motors.

Propulsion efficiency has been increased with a new reduction gear ratio and a three-blade propeller. A pressure vacuum cooling system has been added. Full pivot steering gives a degree of maneuvering impossible with any other method of steering. A shock absorber drive permits you to run over obstructions without damage.

Through an exclusive arrangement a Johnson can be insured at little cost.

Select the motor you want at your dealer's store and if you desire, pay for it on the easy payment plan.

Literature will be gladly sent to those interested. Send the coupon.

JOHNSON MOTOR COMPANY

3032 Sample Street, South Bend, Indiana

Canadian Distributors:

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75 West Street, New York, N. Y., U. S. A.

MAIL THIS COUPON--
JOHNSON MOTOR COMPANY
3032 Sample Street, South Bend, Ind.
Send complete information on:
☐ The Four Johnson Motors for 1927
☐ The new JOHNSON AQUAFLYER
Name _____
Address _____
City _____
State _____

Johnson

Outboard Motors



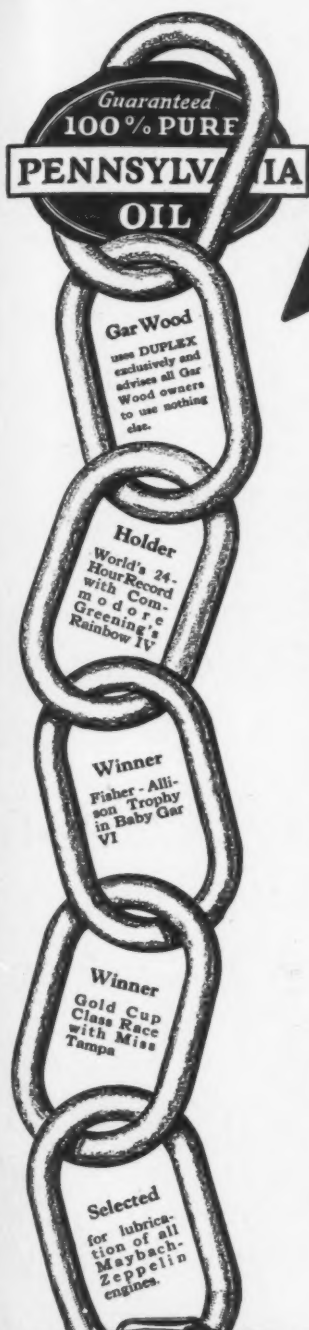
For speed and fidelity

Quick response and faithful response are pre-eminently the characteristics of the Auto-Lite System. A long, successful history in the motor car and motor truck fields has now been followed by the general acceptance of Auto-Lite as the standard equipment for fine motor boats . . . THE ELECTRIC AUTO-LITE COMPANY . . . OFFICE AND WORKS: TOLEDO, OHIO.

Also Makers of DéJon

Auto-Lite

Starting, Lighting & Ignition



Run on DUPLEX MARINE ENGINE OIL

Advises

KERMATH

November 17th, 1926.

Mr. Henry E. Hower,
Enterprise Oil Company, Inc.,
164 Chandler Street
Buffalo N. Y.

Dear Mr. Hower:-

We have been using Duplex Oil for the past year with the finest kind of results and we are only too glad to recommend it to the users of our engines and to the users of any other engines because Duplex is most certainly an excellent product and means many added years to engines when used against the common variety of oils, which are peddled around the country.

Very truly yours,

KERMATH MANUFACTURING COMPANY

President.

JEF:J

ECONOMY in marine engine performances begins—and ends—with oil. Every engine maker will tell you that. Every repair man will confirm it. But what are YOU doing about it?

Why take chances this year, when you can have the grade of DUPLEX Marine Engine Oil which is precisely suited for the requirements of

your particular engine? Duplex takes the gamble out of marine lubrication because it is a strictly marine lubricant—not a renamed automobile oil.

Write today for the Duplex Marine Engine Oil chart. Tell us the make and model of your engine, and let our marine engineers give you the benefits of their research.

ENTERPRISE OIL COMPANY, Inc.

Marine Department: 162 Chandler Street, Buffalo, N. Y.

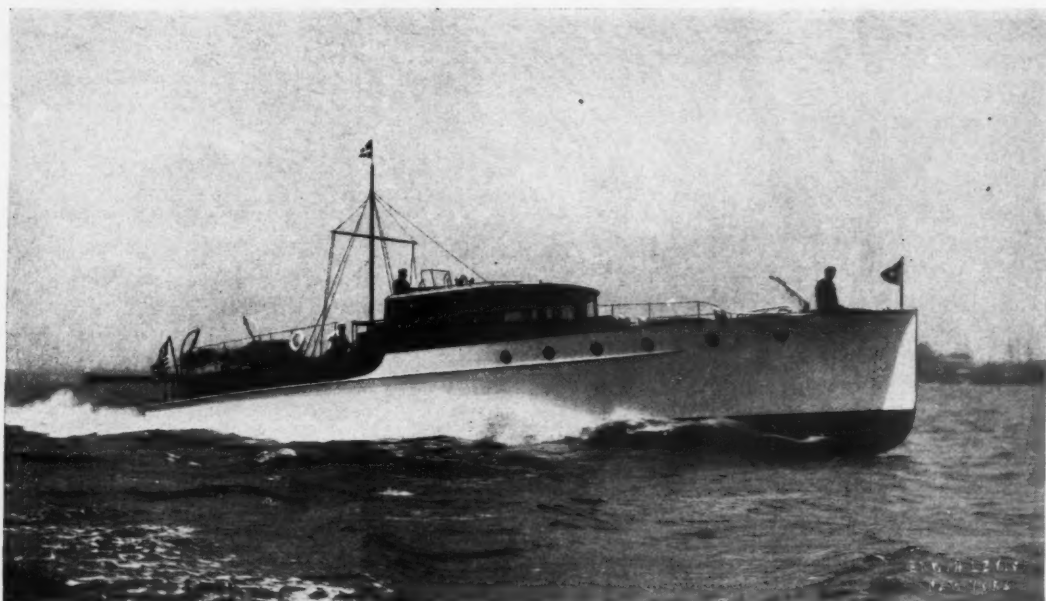
Metropolitan Distributors: Marine Oil Company, 29 W. 34th St., N. Y. City

PREVENTING leaky water pumps, bilge pumps, stuffing boxes and stern bearings is simply a matter of using Kasson Waterproof Grease—send for descriptive booklet.

EXTRA PROFITS FOR DEALERS. Repeat business, in large volume, comes to the dealer who handles Duplex and Kasson. The Duplex selling plan will interest you—write for it today.

Made by the makers of Duplex Motor Oil, used by Pierce-Arrow for twenty-six years, and the first 100% Pure Pennsylvania Oil ever made for automotive lubrication.

When writing please mention MOTOR BOATING, 119 West 40th Street, New York



CHARMING POLLY, Col. H. H. Rogers, New York City, owner; equipped with Kohler Automatic Electric Plant

Photo, Edwin Levick, N.Y.

Have *real electricity* this season

Real electricity means standard 110-volt current to supply bright, unflickering electric light abundantly, and to operate the identical appliances that make city homes so pleasant—percolators, toasters, fans, heaters, and all the rest. That—and no storage-battery annoyance!

If you fit out this season by installing the Kohler Automatic Electric Plant you can take city comfort with you, for this exceptionally capable plant generates 110-volt current. And it has only a small automobile-type starting battery.

How satisfactory such an installation is likely to prove may be judged from the fact that the Maybach Motor Company, selecting the Kohler Automatic for Col. H. H. Rogers' express cruiser, *Charming Polly*, described it in the following terms:

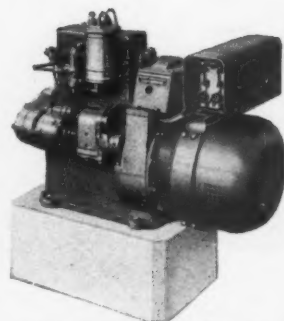
"An ideal electric plant which starts and stops itself was found in the Kohler 1500-watt, 110-volt, automatic plant. It is absolutely dependable, and it is so silent that it cannot be heard in the sleeping quarters."

There is still time to arrange for *real electricity* before the cruising season opens. You can see the Kohler Automatic at Kohler branches in principal cities. Or the coupon will bring you detailed information.

Kohler Co., Founded 1873, Kohler, Wisconsin • Shipping Point, Sheboygan, Wisconsin
ALSO MANUFACTURERS OF KOHLER PLUMBING FIXTURES

KOHLER OF KOHLER
Automatic Electric Plants—110 Volt D.C.
No Storage Batteries

Advertising Index will be found on page 206



Kohler Automatic Model DP
1500 Watts; 110 Volts, D. C.

4-cylinder, 4-cycle, bore 2", stroke 3". Cooling by belt-driven gear pump circulating salt or fresh water. Current direct from generator: 24-volt automobile-type battery for starting only.

Note: Also fitted with 32-volt battery for starting and for auxiliary lighting without operating plant. Similar model has radiator instead of pump cooling. Several other models for marine or general use.

Kohler Co., Kohler, Wis., U. S. A.
Gentlemen: Please send full information about Kohler Automatic Electric Plant for marine use

Name _____

Address _____

MB 4-27

Power To The Blade!

POWER to the blade that is whirled by a Paragon "90" Line Reverse Gear!

POWER for the boatman who wants all the power of his engine where it will *drive* not through a series of whirling gears, but *direct*.

POWER for the engine builder who wants the carefully made performance of his motor to power the propeller and not waste as it goes through a set of moving gears.

POWERFUL "90" LINE PARAGON—now the first reverse gear to give *absolute direct drive forward*. Not a gear tooth stirs not a gear moves it works as if it were a part and a piece of the motor and propeller shaft.

Only a 20 year old company building and specializing in one product could have perfected such an advanced piece of machinery.

Power for ordinary service.

Power for *extraordinary* service.

Power without waste.

Powerful Paragon!

PARAGON REVERSE GEARS

Power To The Blade!

90%

speed in
reverse

The "90" Line Paragon is a "Seven Feature" Reverse Gear

THE Paragon "90" Line has seven outstanding features. Any single one . . . taken by itself . . . represents a decided reverse gear improvement over what has been engineered in the past. Absolute Direct Forward Drive is followed with a full 90% Speed in Reverse. Then comes Heat Treated Gears for long life—Fewest Parts To Wear—Simplified Construction for easy handling—Excess Number of Clutch Discs, and (of great comfort to all boatmen)—a Perfect Neutral.

These features were combined in a single make of reverse gear for a decided reason—modern high speed motors threw more and more work on the gear. The time had come when allowance must be made for the punishment of future motor developments. The reverse gear must be in step with the rapidly developing modern motor.

Now, with the "90" Line Paragon, a piece of reversing machinery is handed to the industry which allows full latitude for motor developments.

. . . and from the boatman's standpoint, he can now place behind his motor a reverse gear that is years ahead with a wide margin of quality for long service.

The slightly higher price of the "90" Line Paragon, adding only a few dollars to the total cost of a "90" Line equipped motor, is justified many dollars over in the assurance that no other reverse gear can match it for satisfaction, and that no other reverse gear has the same stamina inside the steel casing to prevent the unnecessary costs and breakdowns caused by cheaper construction.

Write us, and we will give you more detailed information.

PARAGON GEAR WORKS
203 CUSHMAN STREET, TAUNTON, MASSACHUSETTS

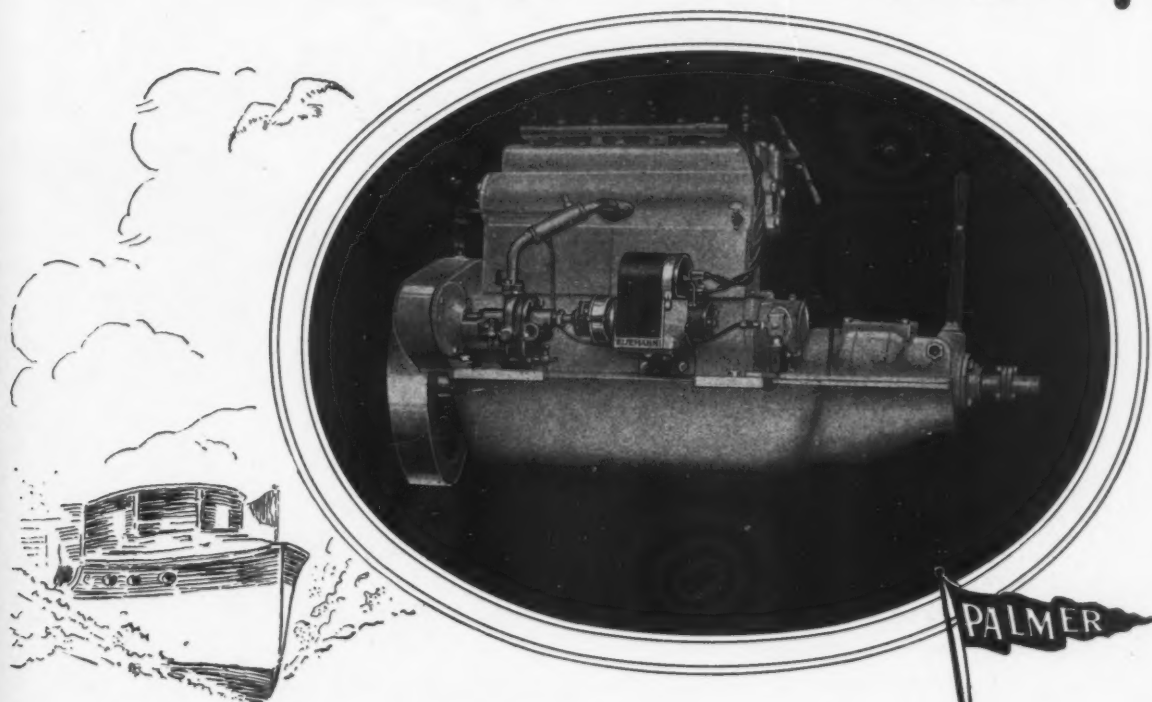
The First Model of the "90" Line Paragon, the 5-90, will be ready for delivery this month. Other models to fit all sizes and requirements will be announced as each is ready to leave the factory in quantities.

PARAGON REVERSE GEARS

Palmer Brothers New Engine

"Little Huskie"

is Eisemann Equipped!



MONTHS of thorough, painstaking tests preceded the final adoption of Eisemann GS-4 Magnetos for this newest of PALMER engines.

Although small and compact, "Little Huskie" is a *high speed engine*—and requires a rugged, dependable magneto.

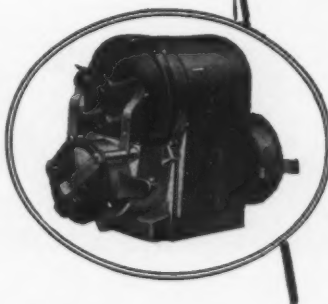
The GS-4 was found to be not only a high quality ignition instrument, but more water-proof and rust-proof than other magnetos, and therefore particularly suitable for this latest addition to the PALMER line. For the "Little Huskie" will be used in open workboats, as well as light cruisers and tenders.

EISEMANN MAGNETO CORPORATION

165 Broadway, New York
SAN FRANCISCO

DETROIT

CHICAGO



EISEMANN

ELECTRICAL EQUIPMENT

When writing please mention MOTOR BOATING, 119 West 40th Street, New York



*Thrilling sport
in perfect safety
awaits you*

WHEN you drive a Sea Sled! Then you'll know the thrill, the sport, the relaxation that only a Sea Sled can bring you . . . in perfect safety and comfort.

The Sea Sled is seaworthy and safe. It is master of every wind and water condition and will take you into shallow or weedy lakes and streams where no other boat can go.

It is the most dependable, versatile fast motor boat afloat. Write for illustrated literature or visit our nearest office—New York, Palm Beach, Miami or Greenwich.

SEA SLED

FAST ENOUGH—AND IN COMFORT AND SAFETY

At Greenwich Conn., we have established a service station for those who summer on Long Island Sound. This service station is completely equipped and under the supervision of Sea Sled experts....for the convenience of Sea Sled owners.

THE SEA SLED CORPORATION

Sole Licensee under Hickman U. S. Patents

Fisk Building, at Broadway and 57th St., New York
 1930 North East Second Avenue, Miami, Florida
 Worth Avenue (opp. Everglades Club), Palm Beach, Florida
 Works at W. Mystic and Groton, Conn.

*Model 23 Sea Sled
 \$3150 and \$3350 F. O. B.
 Groton, Conn.*

*Model 28 Sea Sled
 \$8000 and \$8500 F. O. B.
 W. Mystic, Conn.*

RACING DATES FOR 1927

April 2—Jacksonville, Florida
 June 8—Bear Mountain Handicap, Colonial Y. C., N. Y.
 June 17, 18—First New England National Regatta, Boston, Mass.
 July 2, 3, 4—Mississippi Valley Regatta, Houston, Texas.
 July 9—Block Island Race, New York Athletic Club, N. Y.
 July 22, 23, 24—Cleveland, Ohio.
 July 25, 26—Philadelphia to New York for Cruisers and Express Cruisers
 July 29—Bayside Around Block Island Auxiliary Race.
 July 29—Craig Trophy Race from Execution to Sheepshead Bay around Long Island.
 August 3, 4—Hunt Trophy, Execution Rocks to Great Captain's Island to Cornfield and return.
 August 6—Gold Cup Races, Greenwich, Conn.
 August 11, 12, 13—St. Michaels, Maryland
 September 3, 4, 5—Detroit, Michigan
 September 10-12, Maryland Yacht Club, Baltimore, Md., National Regatta
 September 16, 17—Washington, D. C.
 September —International Regatta at Buffalo, N. Y. for 1½ liter, 151 cubic inch, 725 cubic inch and other classes.
 December 9, 10, 11—San Diego, California National Regatta.



Commodores Bigelow and Wagg in racing costume after driving their Gold Cup racer, Palm Beach Days in three 25 mile heats to a tied point score with Sara de Sota and Miss Tampa at the Palm Beach Regatta

APRIL
1927



119 WEST 40th STREET
NEW YORK, N. Y.

Vol. XXXIX

No. 4

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RAY LONG
President

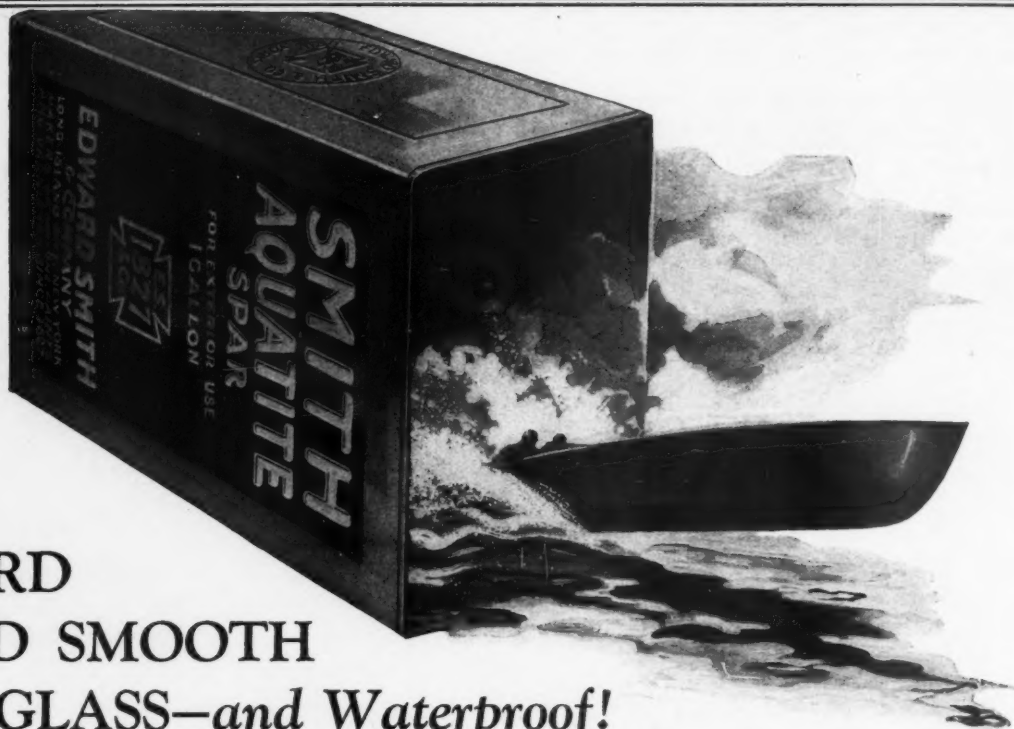
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SMITH AQUATITE SPAR



HARD AND SMOOTH AS GLASS—and Waterproof!

THIS year coat the exposed surfaces of your boat with Smith Aquatite Spar and have a finish as hard and smooth as glass!—not merely a passable lustre, but a surface of radiant brilliance that will make your craft dance with the shimmering sparkle of newness!

With Aquatite this beautiful finish will last, for Aquatite means *watertite*! Fresh or salt water—hot or cold water—calm or turbulent water—cannot turn it white or cause those hairline cracks and checks so common with ordinary spar varnish.

And a word about economy.

Aquatite is extremely tough. It wears evenly! After a season it can be lightly sand-papered

and refinished with a single coat. This saves time and labor. And always you enjoy the same radiant surface you will get this year if you try this remarkable varnish.

Aquatite is made by the same old fashioned formulae that has made Smith Marine Products famous for a hundred years. Only age-old hard fossil gums and finest oils are used. Manufacture is a slow process. Finally, the varnish must age until our experts pronounce it worthy of the Smith name.

OTHER SMITH MARINE PRODUCTS

SPAR COATING

A spar varnish in the old sea-faring meaning of the word. Made from hard fossil gums. Extremely brilliant.

YACHT WHITE

The whitest white made. Semi-Gloss. Can be washed and scrubbed. Won't turn yellow.

YACHT DECK BUFF

Exclusively for this purpose. Flows smoothly. Dries quickly. Won't whiten, chalk, bleach or crack.

There is a Smith Paint and Varnish for every Marine purpose

EDWARD SMITH & COMPANY

LONG ISLAND CITY, N. Y.

Makers of Marine Paints and Varnishes for 100 Years

Biscayne Bay Regatta

A Huge Success

THE BISCAYNE BAY REGATTA, held at Miami Beach, Florida, on March 18 and 19, was a bigger success than ever before. It will go down in history as one of the largest and most successful of any held anywhere in recent years. This was accomplished in spite of the reported lack of interest in Florida generally this winter on the part of Northerners which report, by the way, is far from the truth as to real conditions in the only yachtsman's winter paradise in the world.

The Regatta attracted greater, wider, and more lasting interest than ever before. The speediest craft in the world competed. Gar Wood's Miss America V and Miss America IV both established new world's records for a two-mile course. Imp, the fastest Gold Cup runabout in the country, showed that she is the fastest contender for next summer's Gold Cup event at Greenwich on Long Island Sound. Miss Okeechobee, the world's fastest displacement boat, with Mrs. Conners at the helm, brought her total victories for two years up to thirty. The largest outboard field ever assembled faced the starter in the contests for the Colonel E. H. R. Green Trophy.

In the outboard field, speeds of nearly 25 miles an hour were made in a rough sea. A new world's record in competition was set up in the express cruiser class by Commodore Conners' cruisers, W. J. Conners III. The Biscayne Babies, racing for the third year, performed as wonderfully as ever. The events for stock runabouts proved that these craft are equally serviceable for racing or pleasure.

Yachting celebrities from everywhere were in attendance. The fleet of spectator's yachts was never as large. The shore line around the race course was literally black with spectators for two days, greater in numbers than have viewed any of Florida's sports this winter.

As a spectacle the regatta was a great success. As a sport it appealed strongly to all who love amateur competitive spirit wherever it is found.

But neither in the joy of the spectator nor the satisfaction of the competitor is the greatest value of this regatta to be found. The worth to yachting, to the whole of Florida, as well as to the particular community, and to the industry is measured by the space which newspapers gave to this event.

Column after column was given to the Miami Beach Regatta in every city in the country. News services carried it, and special representatives were on hand to wire reports for their papers. Nearly every motion picture company covered these races.

For two days motor boating, Miami and Miami Beach, were in the public eye. The two cities received country wide publicity as sponsors of the greatest speed boat regatta of the winter. All the advertising appropriations of these two great cities could not have bought this sort of space. As a favorable publicity medium to the sport and industry of motor boating this regatta stood alone.

MoToR BoatinG is pleased to have contributed so largely to the great event.

The next issue of MoToR BoatinG will contain a complete story of the events.

Fourteenth Annual Biscayne Bay Regatta

Summary of Results

March 18, 19, 1927

Course, 1½ Miles, Biscayne Bay, Florida

Grand Free-for-all, 1 Heat 12 Miles—2 Mile Laps

Boat and Owner	Elapsed Time	Speed	Position
Miss America V, Gar Wood	15:10	47.46	1
Miss Okeechobee, W. J. Conners	15:29	46.47	2
Opolocka, C. G. Adams	Flagged	....	3
Biscayne Baby No. 23, Berner			
Pease Co.	Flagged	....	4
Baby Gar, Jr., Berner Pease	Flagged	....	5

151 cubic inch Hydroplanes, 2 Heats of 3 Miles 1½ Mile Laps

Boat and Owner	Time 1st Heat	Time 2nd Heat	Best Heat	Speed
Miss California, R. Loynes	4:21	5:46	41.32	
Spitfire V, J. H. Rand, Jr.	D.N.F.	D.N.S.	....

Biscayne Baby Race, 3 Heats of 6 Miles Each 1½ Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Heat 3rd	Best Heat	Total Points	Position Won
No. 15, G. Bradfield	9:54	9:50	9:55	36.60	1124	1
No. 20, Richard Ward	11:59	9:53	9:52	36.49	947	2
No. 16, Opolocka	10:07	10:08	10:01	35.95	937	3
No. 23, Berner Pease Co.	10:15	10:13	10:13	35.24	834	4
No. 12, H. P. Prigg	16:03	D.N.S.	9:32	37.78	761	5
No. 19, Atlantic Boat Yard	12:28	11:03	10:55	32.98	677	6
No. 11, C. G. Fisher	10:36	12:55	10:59	32.75	452	7
No. 17, Biscayne Imp. Co.	D.N.S.	11:45	D.N.F.	30.64	225	8

Class B Outboard, 2 Heats of 1½ Miles

Owner	Time 1st Heat	Time 2nd Heat	Best Heat	Speed
Phillip Hardware Co.	5:41	5:30	16.34	
H. B. Guthrie	5:22	6:10	16.74	

Outboard Free-for-All, 2 Heats of 4½ Miles Each 1½ Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Best Heat	Speed	Position
Sister Sanford, A. R. Knauer	12:09	11:55	22.66		1
Poison, D. H. Conkling, Jr.	12:05	12:17	22.35		2
Sister Tampa, A. R. Knauer	13:15	12:20	21.90		3
Stepping Out, L. A. Jones	13:31	13:59	19.98		4
Toughey, H. G. Erzinger	15:32	15:28	17.45		5
Miss Humbugus, C. Stanton	....	....	....		6
Kechme II, L. D. Allen	15:24	D.N.F.	17.51		7
No. 51	....	....	....		8
H. B. Guthrie	16:15	....	16.51		9
Sister Palm Beach, A. R. Knauer	D.N.F.	D.N.F.	....		..
Too Much Johnson, H. Kantner	D.N.F.	D.N.S.	....		..

Express Runabouts, 100 h. p., 2 Heats of 6 miles Each 1½ Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Best Heat	Speed
Chriscraft, H. P. Prigg	11:55	12:03	30.22	
Henry Chase	13:44	13:46	26.5	
R. T. Fishburn	13:31	14:21	26.63	
W. F. Ehne	....	13:36	26.46	
F. C. Taylor	....	13:57	25.79	
Biscayne Tent & Awning Co.	14:45	14:49	24.39	

Elco Cruisers, 1 Heat of 6 Miles—1½ Mile Laps

Boat and Owner	Elapsed Time	Speed	Position
Norman, N. P. Walls	36:54	9.75	1
Elco, C. B. Burnett	37:42	9.55	2
Jolly Rover, R. W. Massey	38:35	9.32	3

Express Cruisers, 1 Heat of 8 Miles—2 Mile Laps

Boat and Owner	Elapsed Time	Speed	Position
W. J. Conners III, W. J. Conners	12:43	37.44	1
Gar Sr II, Gar Wood	13:09	36.49	2
Adieu, R. A. Johnson	19:30	24.43	3
Shadow H, C. G. Fisher	19:39	24.41	4
Victor E, V. Erhardt	21:38	22.18	5

Miss America IV versus Miss America V, 2 Heats of 12 Miles Each—2 Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Best Lap	Best Heat Speed	Best Heat
Miss America V, Gar Wood	11:10	10:49	68.05	66.57	
Miss America IV, Gar Wood	11:09	10:54	67.43	66.03	

Free For All Displacement Boats, 2 Heats of 7½ Miles Each—1½ Mile Laps

Boat & Owner	Heat 1st	Heat 2nd	Best Heat	Speed
Miss Okeechobee, W. J. Conners	9:22	8:57	50.23	
Miss Largo II, H. D. Ulmer	9:39	D.N.F.	46.57	
Imp, R. F. Hoyt	D.N.S.	9:11	49.02	
Miss Palm Beach, W. J. Conners	9:39	D.N.S.	46.62	
Sara De Sota, F. Blossom	11:13	....	40.07	
Chriscraft, W. A. Fisher	10:21	Flagged	43.46	
Palm Beach Days, W. McP. Bigelow	D.N.F.	D.N.S.	....
Miss Tampa, C. F. Irsch	Flagged	D.N.S.	....

Gold Cup Class—1st Heat, 7½ Miles; 2nd Heat, 6 Miles 1½ Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Best Heat	Pos.
Imp, R. F. Hoyt	9:58	7:46	46.3	1
Miss Tampa, C. F. Irsch	10:01	8:17	44.92	2
Sara De Sota, Fred Blossom	DNF	8:44	41.22	3
Palm Beach Days, Wagg & Bigelow	10:13	DNS	44.07	4

26 Foot Stock Super Express Runabouts, 150 Horse Power, 2 Heats of 6 Miles Each—1½ Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Best Heat	Pos.
Chriscraft, Chris Smith & Sons	10:48	10:49	33.35	1
Baby Gar, Jr., Berner Pease Co.	11:08	10:56	32.90	2
Baby Gar, Jr., H. W. Lyon	11:27	11:33	31.43	3
Chriscraft, G. Sanchez	11:32	11:39	31.21	4

Colonel E. H. R. Green Trophy for Outboards, 2 Heats of 4½ Miles Each—1½ Mile Laps

Boat and Owner	Heat 1st	Heat 2nd	Best Heat	Total Pos.
Baby Bandit, J. A. Fiske	12:20	12:32	21.90	724
Poison, D. H. Conkling, Jr.	12:16	13:50	22.00	617
Baby Wanderjax, Willard Ware	....	....	23.19	544
Stepping Out, L. A. Jones	13:35	13:17	20.31	520
Me 2, L. D. Allen	12:57	....	20.18	458
Ella, H. H. Taylor	DNF	13:14	20.40	361
H. B. Guthrie	17:34	....	16.6	313
Baby Garlic, W. Charles	....	13:37	19.82	289
Mickey, S. Perkins, Jr.	....	14:32	18.58	225
R. McDonald	DNF	DNS	....	10
Kachme II, L. P. Allen	13:31	13:47	19.96	11
Black Diamond, C. H. Fay	13:13	DNF	20.40	12
Toughey, H. G. Erzinger	17:12	DNS	17.01	13

The May Issue of MoToR Boating will contain a full and complete story of the regatta.



CHAP *Says*

THIS is the season of what the poets call growth and burgeoning, and if you will look in any storage yard you will see the winter covers of all the motor boats beginning to stir uneasily. There is life under them which, after the dormant wintry season, will soon thrust aside the canvas bonds and reveal the genius motor boatman in all his glory. You will recognize him by the ecstatic expression in his eye and the smear of grease across his nose, by the blow torch in one hand and the monkey wrench in the other. Summer is still far away and the ice has not yet left the pools in the shadowed woods, but the fitting out period has commenced and the winter of our discontent has been given the vernal air.

Bending your ear closely you will hear an occasional wail of woe from the interior of a standardized cruiser. That marks the motor boatman who is beginning his second season. Having no experience to guide him, he laid his boat up last fall without asking for advice. He knew nothing about pouring kerosene in his plumbing connections and forgot to drain the water jacket of his engine. And now he has discovered the might and power of water when it freezes in a confined place. He will have a pretty bill to pay before he gets under way, but he will know better next time.

From another quarter comes a terrible lament. Reminiscence is overcoming an enthusiastic yachtsman. He recalls a mellow day last fall when he finished putting his boat out of commission and ate a hasty snack of lunch in the immaculate galley. A delicious meal it was—of crackers and cheese and cold canned salmon. But he forgot to clear up the remains. And now he finds them. First his nose knows, and then his eyes, and then his voice sends out lamentations. He will have to paint the galley and air the boat for weeks before he forgets that last lunch of a season ago.

By these signs you will know that spring is here. In spring, you know, a young man's fancy lightly turns to—Yes it does. For many weeks he has been paying marked attention to her, taking her to the hockey games and the bike races and the big fights. He has listened to the radio with her evening after evening, and he has gradually worked her up to the point of expecting him to announce something on his own account.

But alas for her hopes. Spring is here and the little old last year's boat is calling, and from now until launching time you will see him spending his evenings working around the boat by electric light. Perhaps—this is an optimistic note—he will remember her again when the boat is in the water; but in the meantime his fancy has lightly turned to thoughts of motor boats, and she'd better find a benighted landlubber to bridge over the fitting out season.

Last winter's motor boat show showed more than boats and engines and accessories. It showed that the public has never been so interested in the sport. Hundreds of new boats are on the builders' ways, and thousands of old ones are going into commission. This year will be the biggest ever—and when we say that we don't mean maybe.

A black and white illustration of a woman dressed as a maid. She wears a dark beret, a light-colored short-sleeved blouse with a ruffled collar, and a light-colored apron with a pocket. She is holding a broom over her shoulder and looking towards the right. The background is dark and textured.

Alk Hand's!

*While the Spring Housecleaning Is
Should Employ His Time in
It May Appear in All the Glory of*

By F. W.

SIGNS of spring are forcing themselves on our attention wherever we look. If we were poetically inclined we would see only the robins and the buds on the trees and shrubbery. Being only a boatman however, we fail to see these signs, and judge the presence of spring by others, which to us are much more real. In the same way that the little boy feels the urge of spring by starting his baseball practice, so does the boatman begin to plan what he shall do to his boat during the next few weeks. Very few boat owners have taken the trouble to visit their craft during the cold winter months now past. Only the most hardy and enthusiastic among them ventured out into the cold to do part of the tasks necessary. The remainder are content to enlist the services of their friends and summer time guests, and by a grand display of energy and effort rush the fitting out and get their boats back into the water. The more methodical and careful boatmen on the other hand, does a more complete job, and assures himself that he will not be overhauling his boat a few weeks after it goes over.

There are countless tasks which accompany the annual fitting out effort, and it is only by an orderly arrangement of the work that a really successful and proper job will result. Naturally the more skillful and experienced a boatman is, the easier these tasks fall into their proper routine and place. In beginning his spring time tasks, the novice should take an hour or two of time at the commencement of his work. He should catalog the work to be done, with an estimate of the material and time necessary for each task. All necessary parts can then be ordered, and kept handy until needed. In fact, the wise boatman will have done this much of his work in the fall, and will have arranged for the material and parts during the winter, so that there will be no delay in providing them.

Perhaps the simplest way to tell about the necessary routine to be followed would be to describe all of the many operations necessary on a typical motorboat. We will begin by the most unwelcome task of the lot, which is the cleaning out of the bilge. Unfortunately many engines are not oil tight. In the course of a season's use, a considerable quantity of oil drips down into the bilge, and floats about on whatever water may gather, and distributes itself in a uniform coat impartially over the entire inside of the boat.

New paint cannot be applied over this, and it is necessary to clean this all out. The simplest way under

To WORK

*Taking Place at Home the Boatman
Reconditioning His Craft So That
Bright Paint and Glistening Varnish*

W. Horenburger

conditions like this is to get a large quantity of hot water, and make a strong solution of soap powders and washing soda, which can be distributed about with an old mop, and which will effectively clean out the mess. It may take several applications and considerable time, but the result will be worth the effort. A careful rinsing down with fresh water afterwards will leave the inside of the hull clean and ready for a coat of paint. Possibly the weather at the beginning of the season's operations is still a little too cold to permit working on the outside of the hull. Therefore, any tasks on the inside can be done while the boat is still covered and sheltered. With the help of an oil heater, it is possible to provide a sufficient temperature to make painting and varnishing possible. As a preliminary to repainting on the inside of the hull, a washing down with moderately strong soap solutions will be found a great help. White paint and enamel is customarily used for the inside finish of the living quarters of a boat, and quite usually acquires grime spots and finger marks in the course of a season. While it is true that these can be painted out by the application of several repeated coats of paint, this extra labor is entirely unnecessary. Paint is not made for the purpose of covering up dirt. It is far less laborious and expensive to wash the dirt off first, and then do the refinishing with one coat of new paint which generally is sufficient to restore the necessary brightness to the work. Paint on the interior of a boat is not subject to wear in the same manner as is the case on other parts, so that it serves more as a decoration than as a protection. It is also an advantage to refrain from building up too heavy a coating of paint on the interior work, since in time an excessive coat will chip and peel, making it necessary to clean off the entire mass, and refinish the work again.

Interior varnish work also is not subject to the action of the weather, as is the case with outside work. There is no need of cleaning down and scraping interior bright work in order to secure satisfactory results. Any bright work on the inside of the hull can be washed and then sand papered, cleaned and smoothed. A single coat of good varnish applied to the work will generally be sufficient to restore the luster and brightness.

Should a second coat be necessary, allow the first one to dry thoroughly, and then go over the work lightly with fine sandpaper to cut the gloss, after which another coat will be more than sufficient. One point to remember in doing work of this kind, and that is: when painting is going on in the interior of the boat, keep everyone else out until the work is completed, and then stay away from the boat for a week or more in order to allow the paint to set and harden properly. It has frequently happened that over-anxious members of the crew have broken in on the painter who was doing the inside work in search of a missing tool or part, and in



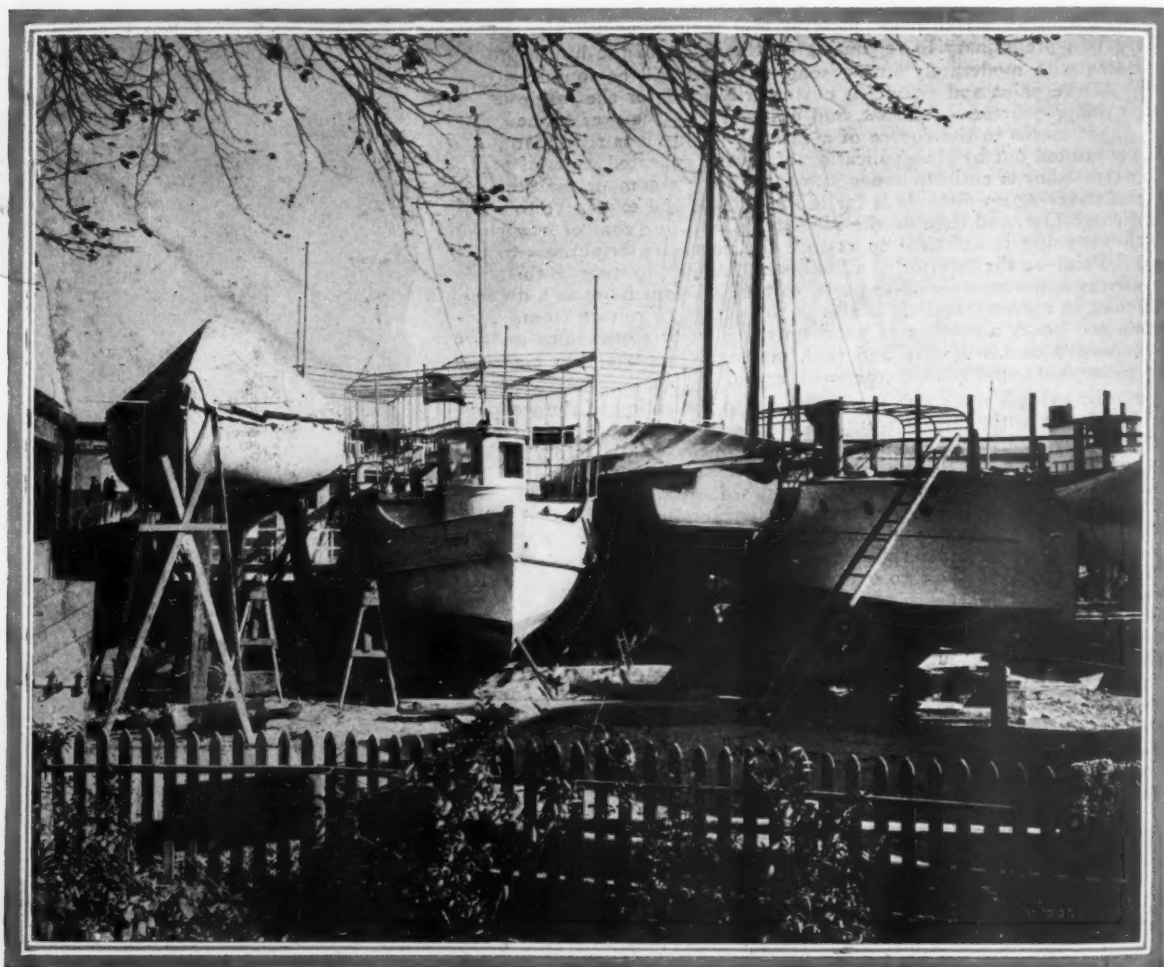
their eagerness have placed grimy hands on new paint or varnish with injurious results. Another point to remember is that paints which are applied to cabin floors should be given a long time in which to dry. If these are walked on too soon the paint will stick to the shoes, and again spoil the finish. So remember that paints must have sufficient time in which to dry and harden before they are used, particularly in the early spring of the year, when drying conditions are not as good as they are later.

Naturally in undertaking the refinishing of a boat's interior, it is advisable to do any work of a mechanical nature before the painting is attempted. Many times small electrical alterations are undertaken, perhaps a light is relocated, or a new one placed, and this should all be done before the painting is started. Also the plumbing fixtures may require new washers on the pumps and valves, and it is well to do this work also.

On the assumption that the interior work has now all been done, or satisfactorily started, and that the weather has improved so that we can work outdoors, it would be well to give some thought to the engine. All repair work and refinishing which is to be done to the power plant should be undertaken next. There seems to be a very prevalent opinion that marine engines require a complete dismantling each spring. It hardly seems necessary to us however, to rip an engine so completely apart as many boat owners do. Naturally, if an engine has been so neglected and operated without sufficient oil that the bearings have suffered, then there is no choice but to replace the worn and damaged parts.

Any engine which has been handled with proper respect and care will hardly be worn so badly as to require tightening, particularly in the bearings. The only portions of an engine which the average boat owner should undertake to overhaul should be a grinding of the valves, a cleaning out of the old oil and a replacing with fresh, and a removal of the accumulated carbon deposit. It rarely happens that the amateur mechanic has a sufficiently full and complete tool equipment to permit him to do more than these few relatively simple tasks. In fact, carbon and valve jobs are now done much more effectively with the help of modern machine tools, so that it is hardly worth a man's time to do this work so much more laboriously by hand. The new electric drills which are now on the market are provided with special attachments for polishing valve seats and the electrically driven valve resurfacing machines do a job which is a thousand times better than the old hand methods. Any one who values his power plant should do this particular operation with the help of this new equipment, as the resulting job will be ever so much better.

More than likely the outside of the power plant will also need a thorough cleaning down, and a repainting. There are special grades of enamels made for this work, which are able to resist heat and the conditions usually found around an engine. These should be used by all means, as ordinary grades of paint will not stand up at all. Another job which is not necessarily part of the engine work, but which should be done at this time is the cleaning out of the gasoline tanks and lines. Ordinarily the sediment which accumulates (Continued on page 86)



Boat yards everywhere are showing signs of activity. Covers are coming off and work is actively progressing

Up and Down GLEN CANYON of the Colorado

*The Weary Battle Against the River Current Is Aggravated
by Flood Waters and Boulders Which Exhaust Both Men and
Engines, Leaving Only Two Outboards to Drive Four Boats*

By Lewis R. Freeman

Author of "In the Tracks of the Trades," "Down the Yellowstone,"
"By Waterways to Gotham," etc., etc.

Part V—Live Deer Fails as Substitute for Dead Engine

THE deer scared up on the right-hand bench of the canyon by our shots and the rattle of the engine plunged into the river a couple of hundred yards above the point from which we first sighted them. They increased that interval materially as long as their course was across the shallows, through which they ran in long bounds that carried all four hoofs clear of the water. But once they were beyond their depths and swimming, the current bore them rapidly down stream. Even at the last, when they turned and swam directly against the set of the river, our two pairs of oars and the engine gave us decidedly the legs of them.

Steering directly alongside the floundering buck, Tom invited me to jump over on his back and take a ride. To this generous suggestion I demurred, but as a compromise offered to try to harness the muscular animal for reserve power. A gleeful howl announced the full official approval of my tender. Then Tom shouted for me to hold the prospective auxiliary by the horns while Bill brought the harnessing rope.

Now harnessing an undeveloped power is a ticklish and technical job, as every engineer knows. To insure its success much

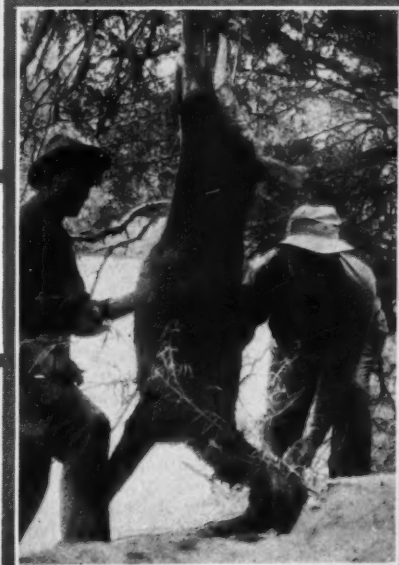
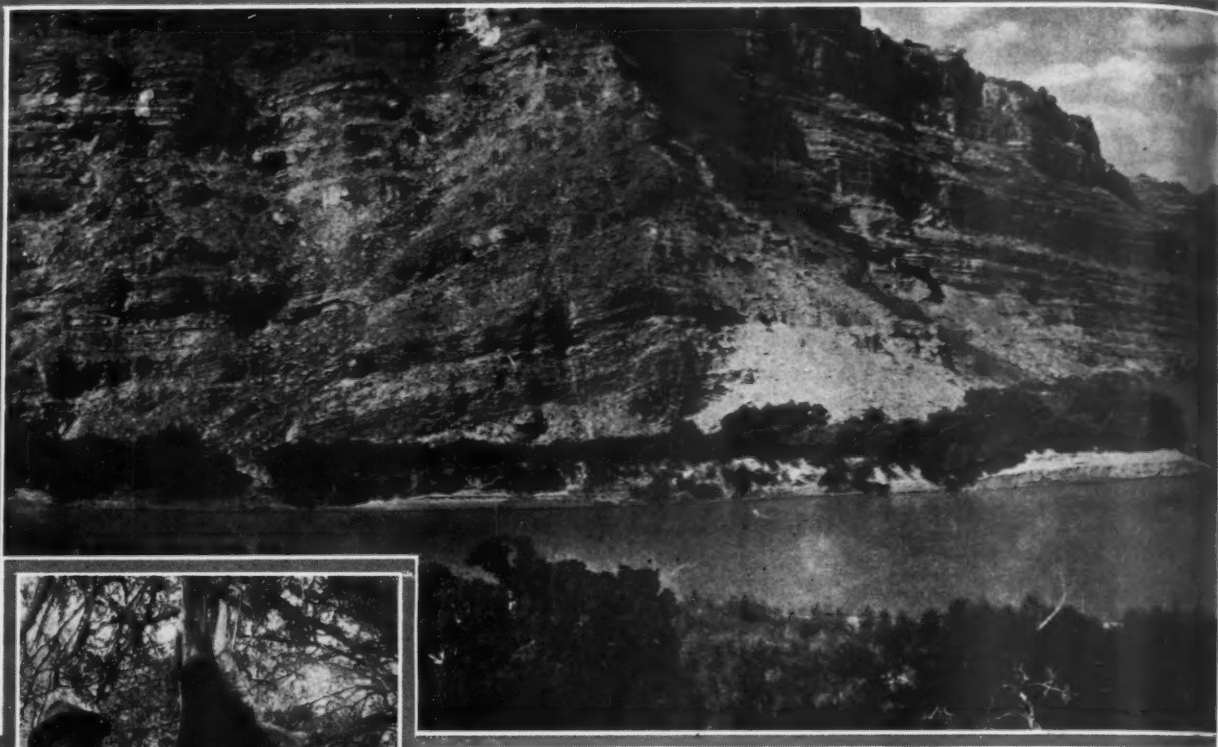


Another rainbow bridge in process
of formation

careful planning and preparing should be done long in advance of the actual harnessing. The reason that there was an early hitch in the present job was doubtless due to the fact that it was attempted quite on the spur of the moment and without a concerted plan of cooperative action. An engineer, or even an animal tamer, would probably have gone about the thing differently.

Hooking a foot under a thwart for greater security, I simply leaned over the side and put Tom's order into execution. Or rather, I executed the first part of it. I held the buck by the horns—for a little while, but not until Bill had brought up the makings of a harness.

Bill was ponderous and slow of movement even when he tried to hurry, and by the time he had recovered from putting one foot through the egg-crate and jamming the other fast in a water bucket, the flailing hooves of my hard-held captive were striking into the solid gravel of the mid-stream bar. With a firm footing the powerful brute picked up headway like a touched-off rocket. Because of the fact that I did not let go his horns until a hundredth of a second or so after he catapulted, I was carried along for a way in



Venison for breakfast. Deer shot from boat in mid stream

The junction of Grand and Green Rivers. Green

his comet-like wake of water and flying gravel. I did not go any great distance as distances go in the West—not over ten or fifteen feet probably—but it was quite far enough to give me an entirely new conception of what really rapid transit meant.

Climbing back into the drifting boat, I found that Tom had shut off his engine the better to make his voice heard, and was hotly debating with Bill as to whether or not what had occurred constituted such an attack on the part of the buck as to justify punitive measures. Finally they agreed to allow action to hinge upon whether or not I had any wounds to show for the encounter. Both seemed rather peeved at me when I exhibited a normal expanse of unhorned and unhoofed cuticle.

Meanwhile the flying fugitives had made good their crossing to the opposite bench, or rather the buck had done so. The doe, in her terror, had continued running so far up the midstream bar that when she did cross to the left bank it was to find herself floundering in deep, swift water at the foot of a perpendicular cliff. Buffeted heavily against the sheer wall and pawing wildly among the half-submerged rocks, the exhausted animal was all but ready to give up the fight when

our very contrite rescue party appeared on the scene. "If you boys have drowned that poor mother doe,"

Engineers of geological survey and reclamation service





Green left, Grand center, Colorado right

Tom had threatened as he started his engine, "I'm going to leave the pair of you here to nurse that orphan fawn on condensed milk. The contempt some folks have for the life of God's creatures is sure a shame."

Bill and I agreed with him and stood-by to make our honors white.

It took some very nice handling on Tom's part to work his awkward double-header in against the cliff without having it swept broadside upon the jutting rocks. He managed it with rare skill, however, and when he reversed his engine and backed out I was leaning low over the starboard bow with an arm round the neck of a fagged-out, wild-eyed doe, while Bill sat on the port rail to keep the boat on an even keel.

Dropping down to the shallows, I released my burden as near to the left-hand bench as the hove-down bow would nose in. But the tired little lady had not the strength left in her trim legs to breast the current even here, so there was nothing for it but for Bill and me to tumble

over and carry her to the beach. Bill, who had once seen a girl dragged out from the surf at Long Beach and revived, suggested rolling her over a barrel and artificial respiration, but they proved not to be needed. Still a bit unsteady on her pins but with rapidly reviving strength, the ungrateful minx kicked gravel in our faces and lurched off into the cover of the baby oaks.

Salvaging baggage from the half-swamped boats at foot of Whirlpool Rapid

Near the mouth of Diamond Creek





Rolling rocks in upper Glen Canyon

Tom and Bill had another argument when we had waded back to the waiting boat. Bill maintained that since we had saved the lives of both the doe and the fawn by our prompt action, we were morally and legally entitled to take that of the buck in liquidation of Nature's debt to us, especially as we were badly in need of fresh meat. Tom agreed that this was sound morally, but legally—since he could not conscientiously swear that we were attacked, it would not go down. A bruise on his shoulder that Bill tried to palm off as a hoof-mark, Tom readily identified as one already complained of as from the kick of the shotgun.

"You boys don't live in the country like I do," he admonished, "or you'd be more leary of breaking the law of the land."

Then, somewhat inconsistently it seemed, he began crooning his favorite refrain as he primed his engine. "And we miss the kwy-et kum-furts of the jail," was the way it went. What jail, and who missed the comforts of it, and why, we were never to learn. That was the only line of the song Tom ever sang.

Bill and I never did cease lamenting the loss of that non-belligerent buck. It was not so much that we needed his carcass for food as it was that we needed his hide to cover our own carcasses. With one pair of shoes after another, and one pair of pants after another, being reduced to river silt, it was only a question of days until

our blankets would have to be cut up for clothes and foot wrappings. The hide of that hulking buck would have gone a long way toward postponing the evil day, especially on the score of providing footgear. Fortunately summer was tempering both winds and waters to the shorn lambs, and before the turn of the year Providence, like the robins in *The Babes in the Woods*, intervened to improvise protection.

Running on in good water until noon, we landed at the mouth of Rock Creek to await the other boats. The riffle here was almost too much for our combined oar-and-engine power plant, and we surmounted it only at the third trial. Lunching, sleeping and bathing in the clear stream, we whiled away the time until four, when Tom decided that we would have to go back to look for the rest of the flotilla. Uncoupling the boats and unloading the pusher with the engine, we shoved off into the current and shot down the riffle we had fought so hard to climb four hours previously.

Fast as we ran, the mauve and purple shadows were piled deep in the canyon before we came upon the rear division wading wearily through the shallows scarcely a mile above the camp of the previous night. Both of the motors had gone wrong a half hour after starting, and most of the day had been spent in trying to coax and bully them back to life. At last hope had been

(Continued on page 62)



The massive sand stone abutments of Rainbow Bridge



A pair of fast Chris-Craft enjoying a brush before the Alba Hotel, Palm Beach

Fast Boats A Florida Hit

THE Florida season has seen a considerable addition to the numerous craft used during the winter in Southern waters. Almost everywhere one goes along the eastern coast from Jacksonville to Key West you will find handsome cruisers, house boats galore, motor craft of almost every size and description. One of the most interesting sights and one that invariably attracts a crowd is a brush between several speedy runabouts. In fact the interest and curiosity for this new form of fast water travel has grown so rapidly that many men and women, too, for that matter have lately become owners of runabouts. The Chris-Craft Cadet a 22-foot duplicate of the already famous 26 foot Chris-Craft is now vying in popularity with its bigger brother. Both boats have proven exceptionally popular during the winter at the fashionable watering places on both the East and West coast of Florida.

Forty-Mile Runabouts One of the Real Attractions of a Pleasant Winter in the South



A Chris-Craft doing close to 40 m.p.h.

The strange thing about this is the fact that as a rule whenever you see one of these forty mile boats dashing by you will invariably find it loaded with passengers enjoying the sea breezes and the sunshine. Those fortunate enough to own a Chris-Craft runabout never seem to lack for friends to take a spin along the shore or out to sea.

This year the sport has proved so popular that many men have let their golf bags rest while they disported themselves on the water. To one who has not snapped open the throttle and felt the released power of a 150 horse power Kermath motor commence to destroy distances we will say that a new thrill is waiting for them in a 26-foot Chris-Craft runabout.

The popularity of these fast boats is extending to many sections and waterways in all parts of the country. Dealers are hastening to secure sample boats for demonstration and for a trial spin.

Do You Know?—

Depends Upon The Care With

LUB

He sent in his card with a pencilled notation "personal business"

HE sent in his card with a pencilled notation "personal business." Probably selling either insurance or bonds, was by natural thought. Thank goodness I am safe from oil salesmen at least! But here was a man whose business was personal, and he was full of woe and trouble—or rather, he wanted very definite information as to just what to do to keep his engine out of trouble, and so I listened to his story.

"I went down to look my boat over yesterday afternoon," he began, "for this early spring weather makes me long to get her overboard. After I got the cover off, my first thought was for my engine. I tried to work her over by hand, but couldn't budge her, and I began to wonder just what might be wrong. I took a rod and pushed it down into the crankcase and brought up some sticky stuff don't know what it is. And then I got to thinking

that when I lugged my battery down and hooked up the starter and pushed the button, maybe something would—"

I had heard the same story before—many, many times. So I cut in with a question as to just what precautions he had taken last fall, when he laid up for the year. "Well, you see," was the answer, "I had to be out of town on business a great deal last October, and then, too, my daughter was going away to school, and I had a number of pressing personal business matters to attend to—". The old, old, alibis—how many times we have heard them. Too busy to give the boat and engine a square deal at the end of the season. The good old craft that lugs us all around from May until October—always ready to go, ready to do her best, asking little in return. And then we are too busy to give her in the autumn the attentions that we are eager to rain down on her in the spring! But that's the way of the world.

?—That The Life Of Your Engine With Which You Attend To The LUBRICATION

By Henry H. Hower

President Duplex Marine Engine Oil, Lt. Comdr. U.S.N.R., Member American Society of Naval Engineers; Member U. S. Naval Institute

So here was this man's engine—a modern, efficient power plant, barely one season old, and he sensed the fact that somehow he had failed to treat it properly. Yet he didn't know just what to do. Like thousands of boatmen, he is a business man, and a successful one. And he was applying business principles to the problem of getting his engine ready for the season. In a nutshell, he had failed—simply been too busy—to lay up his engine properly. He hadn't drained the old oil, he hadn't thought about using oil on the pistons, he hadn't cleaned the oil strainer, he hadn't slushed the bright work—but why go on? Too many fail in the same way.

The work of conditioning an engine for the season's work—at least the major part of the conditioning—should be done when the boat is laid up. But it's like bemoaning the water that has gone over the dam, to talk about last fall now. If we failed to do the things we should have done—and after all, we are all human—what can we do about it now that spring is here? Well, we can do many things, and all of them mean putting money in our pockets.

First of all, let's remember always that the most vital thing in an engine's operation is lubrication. Rivet that in your mind. Metals don't wear out when they don't touch each other. That simple fundamental, once grasped, saves many an hour of grief and many a dollar of needless expense. So let's start with that in mind. If last fall, you just hauled the old boat out, maybe slushed some of the bright work, and called it a day, you are in no shape to start up without some careful preparation.

What about the oil from last year's running? If it wasn't drained out in the fall, the crankcase contains oil, sludge, some heavy ends from the fuel, some water, carbon and a lot of dirt. Nice combination to start up with. So the first job is to get that old oil out. To do that properly, pour in plenty of slushing oil—at least as much as your oiling system takes for a full charge. Don't use kerosene. Never mind the theorists—kerosene is an enemy. Some of it will work its way into the oil pump, some will stay in the sump, and sooner or later it will cause trouble. Get a very light flushing oil—really a non-viscous by-product oil—and give it a chance to mix with the old mixture in the crankcase. Rocking the boat is one good way. An air hose shoved into the crankcase will prove very efficient—the air blast agitates the flushing oil and causes it to mix with the old lubricating oil. Take plenty of time, and then pump or drain out all the oil in the crankcase. Now play safe and once more flush the engine. By the time you have done this twice, it's a good bet that the old contaminating mess has been removed.

What about the strainer? How often did you clean it last season? Got you that time! Well, never mind, clean it now. Take it out, wash it thoroughly with gasoline—not kerosene—and let it dry. (Gasoline will evaporate and by the time you are ready to replace the strainer, the gas will be gone. Kerosene would remain, unless great care were taken to dry the strainer very carefully. And kerosene wouldn't clean as well). Now fill up with your regular engine oil. And use good oil—there are many brands of good, clean, pure oil available. Use one of them. If you are in doubt what oil to use, write to the manufacturer of your engine—he has your interests at heart, for they are his interests as well, and you may rely upon his advice. But what ever you do, use good



oil, and oil that is made for marine engines.

Ready to start up now? By no means, because one of the most important things hasn't been looked into yet. Of course, if when you laid up last fall, you took the precaution to put some clean, fresh engine oil on top of each piston, and then turned the engine over a few times without any ignition, then this advice is not for you. But the chances are you didn't, and what will happen if you start up cold without any preparation? Just this—long before your lubricating system has a possible chance to get oil onto the cylinder walls, your pistons will be rubbing dry cylinders. That means wear, quick wear.

By all means, do this—before even trying to turn over, remove the spark plugs and pour at least a small tea-cupful of engine oil into each cylinder. That's for an average size engine. Vary the amount, more or less, depending upon size. Don't be afraid to use too much. The first few moments running under power will burn it all away, and the amount of carbon won't mean a thing because the engine will be cold, and it takes heat to form carbon. The oil will quickly work out to the cylinder walls, ready to be spread. Now turn the engine over, by hand, if possible before replacing the plugs. If not able to turn it over, just use the starter, gingerly at first. The main thing is to work the pistons up and down a dozen times or so without ignition. That lubricates the cylinder walls, and frequently starts oil in toward the wrist pin.

Just let me emphasize the importance of this once more. Wear takes place when surfaces are dry. Don't try to start up without making sure that your cylinder walls have plenty of oil. It's cheaper to burn oil than machinery.

Now your oil strainer is clean, all old oil, dirt, emulsion, carbon and general crankcase muck have been removed, the cylinder walls are amply lubricated and the crankcase is full of clean, fresh engine oil. Make sure your water pump is O. K., and that your ignition is ready. Start up, and throttle down at once. Don't race the engine. Let her warm up slowly. Give your oil pump a chance to get that fresh oil to all parts of the oiling system. Give the oil you put on top of the pistons time to burn off. Never mind the smoke—bless it, instead. No engine ever seized up, stuck a piston, or scored a cylinder wall from too much oil. Take full five minutes of slow running, then open up a little. If you have done all the things outlined, it's fair to say that you

have gotten your engine away to a flying start for the 1927 season.

I haven't tried in this article to touch upon valve grinding, carbon cleaning, replacing worn wrist pins, or checking up piston rings. That properly belongs under the heading of general engine overhauling. But wait a minute—what makes so-called general overhauling necessary? Ever stop to think about that? I can give you the answer, borne of some twenty years' observation of internal combustion engines of all kinds. *Ninety per cent. is made necessary by faulty, insufficient, inefficient, or downright careless lubrication!* Maybe that seems a strong statement. It isn't. Ten percent is made necessary by straight operation—occasional valve grinding, and sometimes carbon cleaning. But of all the tens of thousands of dollars spent annually by the motor boatmen of this country in overhauling engines, replacing bearings, wrist pins and piston rings, grinding cylinders and fitting new pistons, ninety per cent is needless waste. And any engine manufacturer will tell you the same thing.

But never mind the moralizing. Let's start out in 1927 by giving the engine a square deal when we first go overboard. Just do the few simple things I have suggested here and your engine will repay you ten-fold in smooth operation, long life and reliability. Remember that your engine depends absolutely upon you—the owner.

And remember, too, that the manufacturer who designed, developed and then produced the engine you are using, put into his work many months of tireless, conscientious work and skill. Many men have worked on your engine—draftsmen, pattern makers, foundrymen, machinists, assemblers and testers. Remember that these men have had as

their aim the building of a reliable, durable, long-lived power plant. But above all else, remember that all these men have done can be nullified by lack of thought and care on your part. Remember that engines do not as a rule wear out because of use—instead, they wear out by neglect. Millions of dollars can be saved annually if the engines in American waters are kept from premature wear and tear. Don't be afraid to use your engine—open it wide when you feel like it IF you have made sure of two things; first that you are using the proper oil; second, that the oil is in good condition.

Some Pointed Points

Your engine depends upon you—the owner. It is helpless save for your care.

Ninety per cent of engine trouble is directly traceable to careless lubrication.

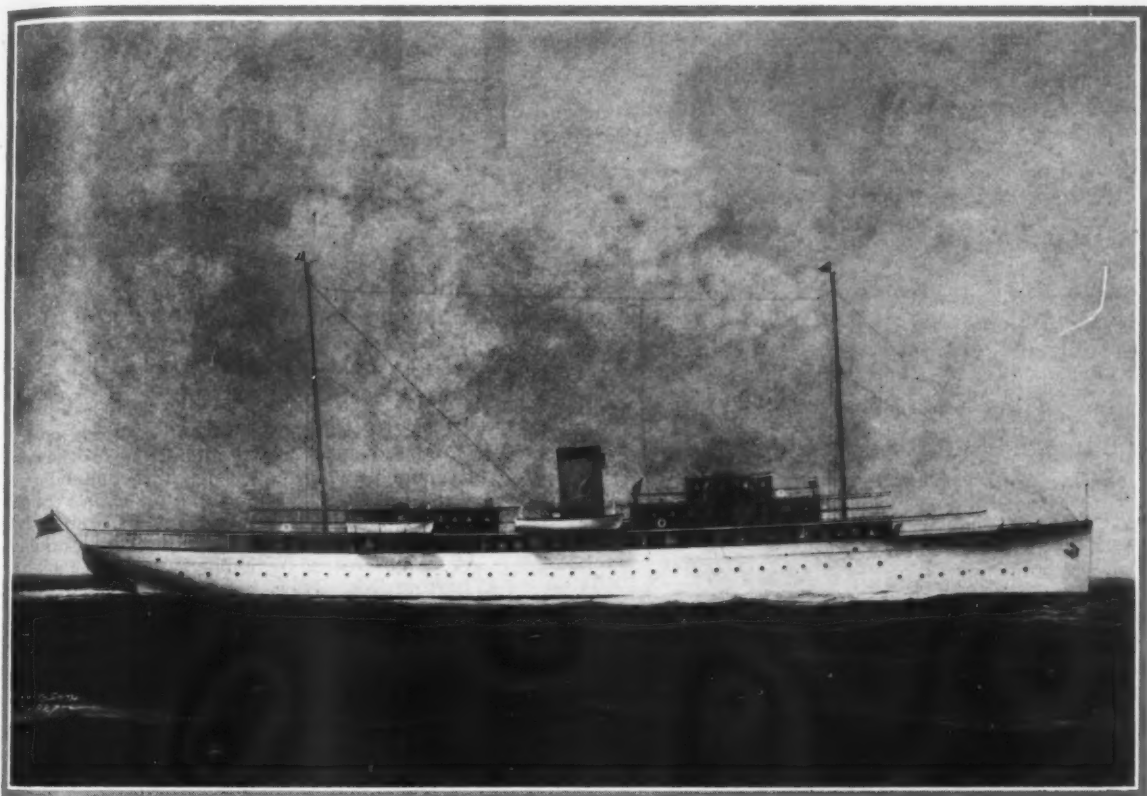
Nothing is of more importance in fitting out the boat than in making sure the engine is ready—and a few simple precautions are all that is necessary.

Don't turn your engine in the spring without making sure that your cylinder walls are amply lubricated first.

If you fail to clean out the crankcase sludge and muck before starting up for the season, you will have trouble and plenty of it.

Your oil strainer is in your engine for one purpose—to catch dirt. But it can't function properly unless you clean it.

Watch for a further article by Mr. Hower in May MoToR Boating on the best methods of changing engine oils



Wash drawing of the new 294 foot Diesel yacht being built at the yards of Pusey & Jones in Wilmington

3,000 H. P. In A Diesel Yacht

A Large Powerful Craft Now Being Built at an American Yard from Designs by Henry J. Gielow, Incorporated

AMERICAN designers and ship builders are undertaking the construction of yachts which are becoming larger and more powerful all the time. There is under construction at the present time the largest and most powerful of this class of boat yet undertaken. This vessel is to be some 294 feet in length, and to be powered with two Bessemer Diesel engines, with a total of 3,000 h.p. This vessel was designed by Henry J. Gielow, Inc., the New York naval architects, and its construction is now actively going forward at the Wilmington plant, of the Pusey & Jones Company.

The arrangement of the interior provides on a lower deck quarters for a crew of sixteen men with ample space for extra help. On the same deck are also the cold storage spaces, water tanks, oil tanks and fuel tanks, all worked into the hull of the ship. In the raised forecastle forward are stateroom accommodations for the officers and petty officers, together with separate mess rooms for the crew and officers. These are removed as far as possible from the sleeping quarters, so that the night watch will not be disturbed during the day by other occupants of the mess rooms.

Amidships is the machinery space, with guests' quarters, comprising seven large staterooms, and eight bathrooms. Two of these are provided with individual dressing rooms. Ample wardrobe space has also been included. Further aft are four additional staterooms for

the maids and valets, as well as a large baggage and valet's work room.

On the main deck forward are quarters for the steward and mate, followed immediately by the dining room which is 25 feet square. This has pantry and galley on the portside aft, with a laundry and drying rooms close by. On the starboard side is a passage way which leads from the dining room into the living room. The living room just aft of amidships is equally large and has a fine fire place. Doors lead from this into a passage way and lobby, which connects with several sitting rooms, as well as the owner's suite of staterooms.

On the upper deck, which will be decked out to the sides of the ship, providing wonderful promenade accommodations, are two houses, the forward one containing the owner's observation room with large plate glass windows, making it possible for one to lounge around when under way at sea, in large, comfortable easy chairs, and obtain a full view of the surroundings. A vestibule opens off from the observation room with staircase leading down below. From the vestibule we enter into the Captain's office and the captain's stateroom, with the wireless room in the after end of this house.

The after deckhouse is laid out to accommodate the gyro compass in the forward part a large deck locker, deck toilet, and an owner's

(Continued on page 156)

Hang the

Said the

A Short Story By

WELL, (said old Tom Monroe) these novelty races make a regatta interesting for the common people, but I think the commodore is going too far when he hooks up a pie-eating contest with a bang-and-go-back race. Yes sir, somebody's sure to swallow his knife when the second gun goes or get so gormed up with blueberries he can't see the starting line. Now, the private race the commodore pulled off last year for his two sons was something worth doing—a cross-country event between car and motor boat.

Oh, you think a cross-country race is unusual for a motor boat? Well, so was the prize the old man offered—one of these Bear Cub runabouts he'd just had built over Southwalk way. See—there's one of them out there, doing thirty-five if it's doing an inch. Worth racing for, I'll say, and if the old boy had allowed airplanes in the race I'd have swiped one and tried it, though I've never been up in the air in my life. Actually.

Now, you see that tall boy down there on the float with the pie in one hand and the black hair on his head? That's Commodore Finch's son Pete, and the other one about a yard behind him is his twin brother Jake, which is short for Henry Alexander. Both boys are natural born mechanics, and I hear they fitted out their baby buggy with an air-cooled motor before either was able to walk. In fact, neither of 'em can walk much to this day. Pete grew up on roller skates and bicycles, and Jake makes it a point never to go anywhere unless he can swim or sail there.

By the time the boys got to be fifteen years they'd invented everything from submarines to radios, and there wasn't a piece of machinery on this place that wasn't minus a few wheels and acted like it. Like as not if the old man ordered out the Rolls to take him to the city I'd have to tell him. "Sorry, sir, but Master Jake has borrowed the storage battery for his patent

The hatches were open and there was a black head of hair bobbing up and down around the engine

E^expense[”]

he Commodore

y By Alfred F. Loomis

fly-killer and Master Pete has taken off the distributor to try it on the tractor. I'll get the station car ready if you ain't skittish about riding without brakes."

So the commodore, when he'd had enough of that sort of thing gave each of the twins five hundred dollars and told 'em to buy something automotive with it. He didn't care whether they bought a balloon or a steam roller—they were to get *something* and from that minute never monkey with another machine around the place.

The way Pete felt about wheels it wasn't surprising he soaked a hundred bucks into an old Ford chassis and spent the rest getting new gears and axles and one thing or another and turning it into a streamline racer that would do fifty miles an hour. And Jake ran true to form when he picked up a second-hand V-bottom runabout and tuned it up till it was good for ten miles an hour. Not that either of 'em ever ran ten or fifty miles in a clip. Their idea of a good time was to get their engines hitting right on all four and then after a little trial spin take 'em all apart and put 'em together so they ran even righter.

So when the twins had been on their good behavior nearly a year and the old commodore had gotten over being afraid the car would fall apart when I took him for a ride he decided he'd give the boys a reward of merit. I was there when he put the proposition up to them.

"Boys," said he, "I've just had a look around the house and grounds and everything seems to be in working order. The clocks run since we sent them back to the factory for the missing parts; and the refrigerating plant is once more making ice instead of a bad smell. The gasoline lawn mower isn't being used for cutting weeds in the bay this season, and I have no complaint to make.

"Which being the case," he says, "I'm going to give a prize to the one of you that wins it, and while it may be that the prize is one that Jake would rather have than Pete, on the other hand it might be Pete that would rather have it."

"Coming right down to cases, Governor," says Pete, "and cutting out the oratory, what's the prize?"

"A Bear Cub runabout," says the Commodore. "The traffic's so thick on the roads these days that I'm taking to the water. Whichever one of you is the best mechanic gets the Bear Cub."

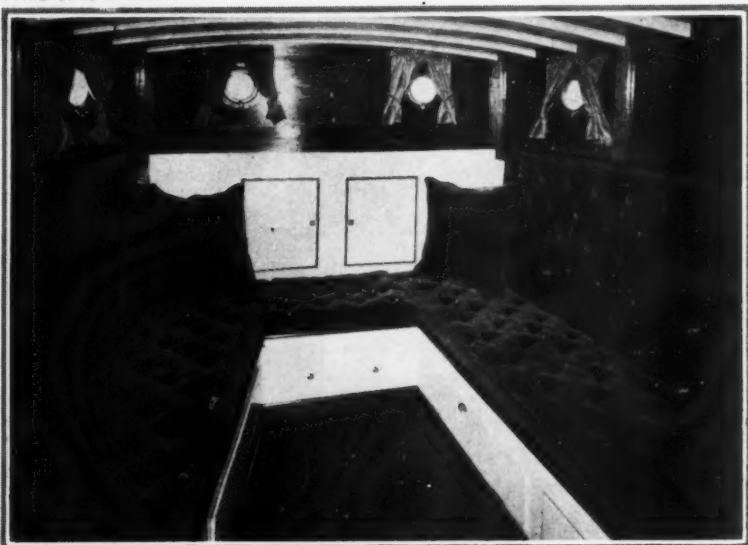
"I guess that lets me out," says Jake. "Pete's the best mechanic and he has to be to keep that flivver of his from falling apart. Now if you're going to give the Bear Cub to the guy that always gets to a place on time, why I'll just naturally take it."

"I'm going to give it to the one that gets to the builder's" (Continued on page 132)



Photograph by M. Rosenfeld

PROGRESS in cruiser construction has developed rapidly within the last year, and the new 38-foot Fleetwing cruiser built by the Greenport Basin and Construction Company is an excellent example of the development in this field. This boat is patterned after the famous cruiser Brickton IV, which performed so notably in its first season last year. This new boat is substantially constructed with bulkheads and partitions mount-



Interior of the roomy after cabin of Fleetwing

compartment with a white enameled stove so arranged that it can be supplied with Protane gas or alcohol as fuel.

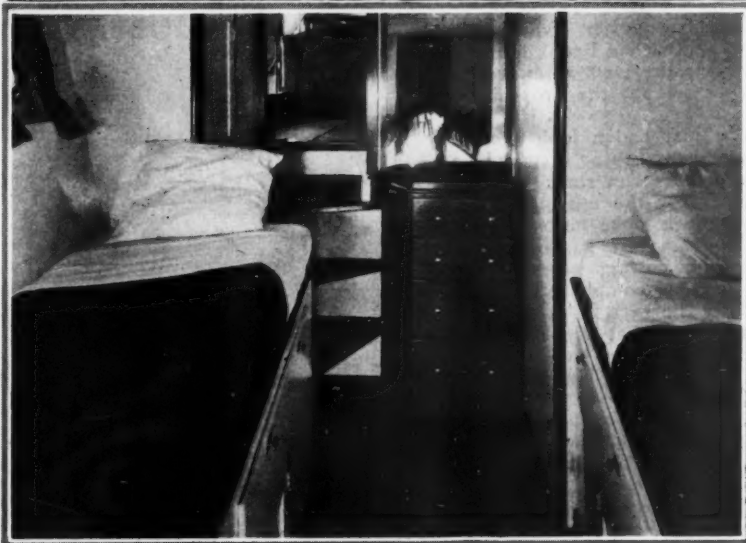
The bridge deck is the outdoor space on the boat, and is wonderfully large. A separate companionway is fitted to the engine room which is under the bridge deck, so that the crew may enter without disturbing the other occupants of the boat. Two large non-rusting gasoline tanks with a capacity of 168 gallons are carried, as well as an

The 38-Foot FLEETWING

One of the First of the New Standardized Cruisers to Be Supplied with the Modern Reduction Gear Power Plant

ed on the keel before the planking goes on, so that the hull will retain its shape. In fact all fittings, engine installations, plumbing, etc., are completed before the planking goes on, since the prime function of this is merely to keep the water out. The boat does not depend on the planking for its structural strength.

The arrangement of the boat is excellent, since it has a large stateroom for the owner forward, which is completely equipped with full size clothes lockers, dressers, and other storage spaces, so necessary for cruising in comfort. A separate cabin in the stern is available for guests, and is also fitted with comfortable berths and lockers. The galley is in the after cabin and is a separate



The forward cabin is fitted with two large berths and an abundance of lockers

80 gallon water-tank. Two smaller 15 gallon tanks are also fitted, which can be used for lubricating or other oils.

In operating this boat, the steersman has a clear vision forward at all times, and there are no obstructions to interfere with his outlook.

For a power plant a six cylinder Continental Van Blerck engine of 3 1/4 inches bore and 5 inches stroke has been selected. This engine has a displacement of only 331 cubic inches and is rated at from 50 to 90 horsepower at a maximum of 2,500 revolutions. A three to one water cooled reduction gear however, permits this small engine to turn a 30 inch propeller which enables the boat to move at over 12 miles.

A WORLD'S CHAMPION

of 1960



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Motor Boat, T



The **G**lory **T**hat is **T**heirs

*Thirty-Four Feet or 200 Feet of
Happiness—It Makes no Difference*



Ashore with the catch. Captain John Edwin Hoag, the man who crossed North America in a motor boat is shown here. The fish, a 194 pound black sea bass was caught in the Pacific from a sixteen foot Evinrude outfit



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Solving the Baggage Problem

*Difficulties in Transporting
Outboard Engines by
Ship or Rail Cleared by a
Substantial Shipping Trunk*

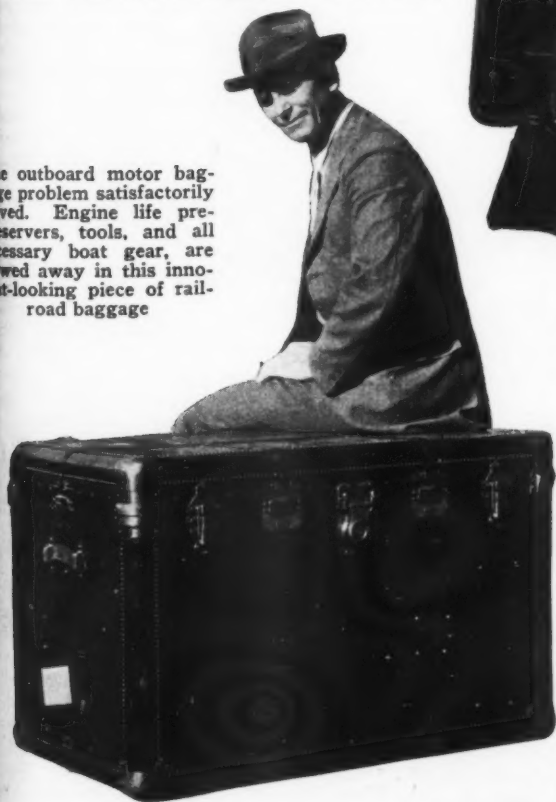
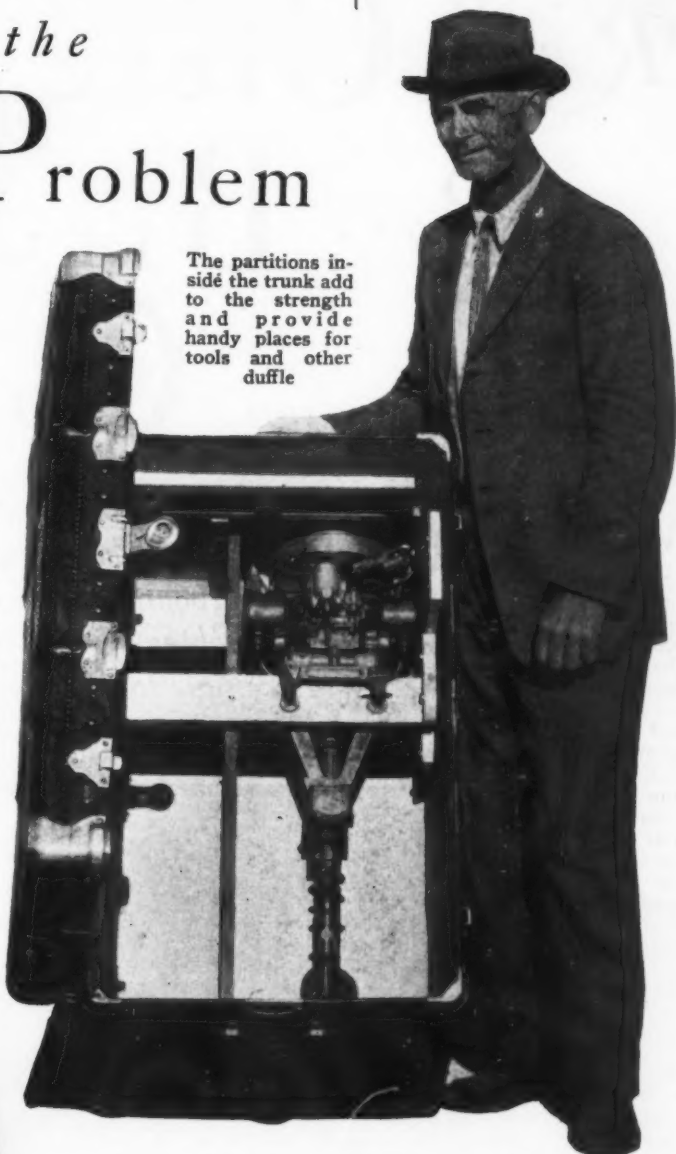
By John Edwin Hoag

ONE of the great advantages of the outboard motor for lovers of water sports is its feature of portability. Yes, any outboard motor is portable, but it is portable as baggage when one wants to go somewhere by rail or ship, only under certain circumstances. An outboard motor can be shipped as baggage if properly packed in a substantial container that will permit its being classified as baggage. Otherwise, the outboard motor user who seeks to take his motor with him on a trip by rail or steamship, will find that his motor is not baggage at all—but, express. Moreover, express is expensive. It is particularly expensive when one has a free baggage allowance that cannot be utilized.

An outboard motor can be carried to the water's edge in one's automobile without any container whatever, but railroad and steamship

The outboard motor baggage problem satisfactorily solved. Engine life preservers, tools, and all necessary boat gear, are stowed away in this innocent-looking piece of railroad baggage

The partitions inside the trunk add to the strength and provide handy places for tools and other duffie



baggage is a horse of another color. The writer learned this to his regret when it was attempted to take an outboard motor on a train trip two years ago in one of those boat-bottomed, canvas carrying cases furnished by the outboard motor people as an accessory. When I got to the railroad station within about ten minutes of train time, I was politely informed by the baggage clerk that he could not accept the outfit for shipment as baggage. The reason—it did not comply with regulations as an acceptable piece of baggage. There was nothing to do then but rush around to the express office, ship the engine by express, and dig up \$10.80 for the charges. Had the motor been in a suitable container I could have taken it as baggage at no expense whatever.

The outboard motor manufacturers catalog various types of small trunks for carrying outboard motors as baggage. These trunks meet the requirements of railroad and steamship baggage regulations, but have several distinct disadvantages. In their efforts to build such trunks and sell them at the lowest possible cost the manufacturers have been forced to resort to cheap and flimsy construction. Consequently, such outboard motor trunks are a baggage smasher's delight. One short trip, and the trunk is usually ready for the junk heap. Another trouble with such trunks is (Continued on page 98)

Ruined Cities Rare Birds and Common Crocodiles

By
Gregory
Mason

Part V
Conclusion

WHEN the wind, shifting easterly, drove us out of our newly discovered walled city of Xkaret in the fear that the schooner would drag her anchor, we put-putted southward about a mile and a half. Here we found an indentation in the shore line giving just sufficient shelter for us to let go the sand anchor and consider the vessel safe.

Our pilot, Castillo, said this slight cove is called Inah. In writing of his visit to Tulum some fifteen years ago the explorer, Howe, mentioned hearing a report of ruins at Inah; but we are not at all sure that this is the place inasmuch as the pilot applied the same name yesterday to a place about five miles north of here. At any rate, for an hour before sunset we cast through the bush looking vainly for ruins.

The maps and charts which we have brought, including the charts of the United States Government, seem to be more often wrong than right when it comes to putting down names above dots along this shore. We have been particularly anxious to locate Pole, which was an Indian port of importance somewhere opposite Cozumel Island in the time of the Spanish Conquest. It was here that the chiefs of Cozumel formally submitted to Montejo. Pole is indicated on several maps of this coast, but none of the natives we have asked about it has ever heard of such a place. Not even with any of the combinations and permutations of pronunciation which we have tried.

This morning at seven we left the second so-called Inah and with one of Albert's engines helping the fair wind in her rather abbreviated sails we reached Paalmul at seven-fifty. We judge, therefore, that Paalmul is

A Scientific Expedition Which Has Explored Ancient Ruins in Yucatan and Mexico Found the Modern Outboard Engine of Great Assistance in Reaching Remote Points Not Accessible to a Larger Vessel

From Buccaneer Coast to Lake Bacalar



Round building at Paalmul (back view), possibly an observatory

which was prevented from landing here by weather. As a matter of fact, this temple was the last of the Paalmul buildings which we visited. When the schooner had anchored we went ashore in Imp through a passage in the reef too narrow to be safe for Albert. Imp's prow scratched a fine hard beach before a large building about which some thirty mules and horses were tethered. Ten or twelve *chicleros* crowded to the water's edge, intensely curious about our little outboard motor, as are all the natives. Hardly had they accepted our English cigarets than they told us there were other ruins in addition to the temple on the shore, we engaged a guide to show them to us. Altogether we found twelve buildings here, the most interesting a perfectly round one which we believe was once a Maya astronomical observatory. Without telescopes the Mayas built up an extraordinary knowledge of astronomy—which doubtless stood in good stead their great trading canoes when they were blown out of sight of land. Like all Europeans of that time the Spaniards who conquered Yucatan counted time by the Julian Calendar (which, by the way, was

some five miles below our anchorage of last night. (Albert has no log.)

Long before we were abreast of the mouth of the mile-wide bay on which this village of *chicleros* is placed we sighted splotches of the familiar bleached thatch color which indicates native huts. A moment later Griscom, who enjoys glimpsing a ruin almost as much as a new species of humming bird, exclaimed:

"That grey peak to the left of those huts looks like a temple!"

It turned out to be a temple we have long been looking for, one seen by the Carnegie Institution Expedition of 1916

abandoned by Greece and Russia only since the world war). This time count was vastly less accurate than the Maya Calendar. Speaking of the 405 revolutions of the moon which are computed in old Maya book, the Dresden Codex, Dr. Morley, of the Carnegie Institution says:

"So accurate are the calculations involved that although they cover a period of nearly 33 years the total number of days recorded (11,959) is only 89-100 of a day less than the true time computed by the best modern method—certainly a remarkable achievement for the aboriginal mind. It is probable that the revolutions of the planets Jupiter, Mars, Mercury and Saturn are similarly recorded in the same manuscript."

That night off Paalmul was the coldest one we have had yet. Of course I chose it to sleep on deck. I was driven there by tick bites.

Cures for the itching of tick bites are as difficult as preventatives of the biting. The ten percent sugar of lead in pure glycerine recommended to me by George Laird, of the Chicle Development Company, is the best palliative of the pain I have ever found in a bottle. The best one of all, though, is application of ice. A portable pocket ice plant would make the inventor's fortune.

Lacking ice the sufferer may immerse himself in the coolest water available. But we can do that only by risking mandibles which might end the suffering by ending the sufferer. Yet when one has twenty or thirty raw red tick bites nicely bunched one is sometimes tempted to invite a barracuda to tear out that whole offending section of one's anatomy.

Loading baled chicle aboard a schooner at Puerto Morelos



Seeking relief in coolness I went on deck about one o'clock. The usual weekly norther was blowing (members of the crew say this is the coldest winter within memory by virtue of frequent three-day northers).

But the cure was not much better than the disease. Soon my teeth were chattering and for every tick bite I had a hundred

Little cove of Xkaret (Maya word meaning little cove). First group of ruins hidden by trees at left, others further back





A temple at Cozamel discovered by the expedition

goose pimples. The next three hours were an alternation of tortures. Either I was dangerously chilly, or comfortably warm and tortured by bites. For the moment one's skin is at a normal warmth, the bites burn with a heavy agony like flesh that is roasting.

At last, with exhaustion, came sleep. But after an hour of that I was roused by the touch of cold rain. I pulled over me a pup tent which serves me as a water proof blanket, and I tucked its edges under the mattress on the deck in order to keep my foundation dry.

Confident that I was safe from the elements I dozed

General Jose Puk, Chief of the Indians at Acomal with his family



off, only to awake again with a sensation of unpleasant dampness beneath me. Water had come up through the mattress, which was now a saturated sponge.

The night was thinning anyway, so reluctantly I stood erect. The resultant noise was like an elephant wrecking a tent under a waterfall. It reminded me of the tumult of a Chautauqua tent which once fell on me in the middle of a cloudburst. Several quarts of water which had collected in the valleys of the collapsed pup tent sloshed to the deck in cascades.

As the ultimate frustration of the struggles of that agonizing night this was somehow overwhelmingly funny. Griscom, who had patiently borne my night-long efforts to achieve quite repose, laughed and laughed till the tears rolled down his face and the whole schooner was awake.

After a long morning of photographing and measuring the buildings at Paalmul we persuaded Anacito Oc, our guide there, to ship with us for the four mile run to Chakalal, where he said there were more ruins.

There is greediness behind the haste with which we dash from one group of ruins to another. We are not forgetting that several previous expeditions were prevented by the prevailing east wind from discovering the buildings which we are studying. Always in our minds is the rumor that Gann, the British explorer, is coming down this way in a schooner. We are like men in a gold rush, trying to stake out as many claims as possible before all work is stopped by the blizzards of Alaskan winter.

After the wind had driven us from Xkaret by shifting to the east it obligingly backed into the north again and has held there. Of course the scope of our expedition is purely explorative, anyway, but we are hurrying

An old Spanish fort at Bacalar

down this particular segment of coast faster than we should were not our work dependent on the continuance of an off-shore wind. Once we have staked our claims, that is, discovered as many new sites as possible, we can return for more intensive study.

If weather does not permit returning by sea we may revisit these places by land another season. Now that the profits of chicle gathering are bringing the Indians to a peaceful frame of mind toward foreigners it will be quite feasible to leave the railhead at Valladolid in the State of Yucatan and strike through the bush to this coast.

A beach inhabited by a species of sea snail which provided our soup for two days marked the spot to land at Chakalal. Oc had worked here three or four years previously with a gang of *chicleros*. He thought he could find a trail they had cut which passed a Maya temple. He had to hunt for an hour before he came upon it, and then he found it almost at the spot where he had first plunged off the beach into the jungle. It was so overgrown that Spinden and I had no evidence of it but Oc's word. In the bush we found three buildings, one of them containing an old incense burner. But the next day in a similar temple on a half hidden lagoon north of our anchorage we found something more valuable. Gough came up-

Pilot George Bevans and Captain Gough



A two story building at Paalmul



Jose Puk, Chief of Acomal Indians, came aboard the ship

on this temple while looking for fish. They swam over a bright sandy floor of the bay, especially fish about two feet long of a luscious dark blue. This little bay is perhaps four hundred yards long and two hundred yards wide, ex- (Con. on page 146)

How Outboard Speed

*The Rapid Progress of Design
Has Produced Startling Increase*



A Bi*Plane hull
travelling fast on
an even keel

NOT so many years ago, the accepted use and service for the outboard engine was to substitute for oars in driving row boats of the generally known types familiar to everyone. These boats were all heavy displacement craft, with no pretense at refinement to help the speed, or any particular attention to the lines to allow easier motion through the water. Naturally with the more general introduction of the outboard engine, there soon appeared rivalries among owners of various boats and engines, and claims for speeds were made on all sides. The manufacturers of engines found that the cry for speed, made necessary larger and more powerful engines, which in turn were applied to the same general types of boats. Strange to relate however, the increase in horse power of the engine failed to produce material gains in speed until some enterprising designer conceived the

thought of building a boat on the order of the hydroplane for outboard propulsion. The earlier types of boat were pushed and forced through the water by brute strength, and were driven up to the speed possibilities of the hull. Beyond that point they would not go even though more power was applied, and the result of a continued increase in power was merely to create a greater fuss at the bow and sterns of the boat, and the digging of a deeper hole in the water behind the boat. The advent of the hydroplane type of hull changed this condition almost overnight. The theory was modified so that the hulls were no longer required to travel through the water, but by their shape and reduced

Speeds Have Doubled

Design of Outboard Motored Boats
Increases In Speed During Recent Years

By Bruno Beckhard

Photographs by M. Rosenfeld



Sister Palm Beach a good example of the hydroplane type hull as used with the most powerful engines

ing the final standard of efficiency is based on speed and the relation of speed to power. The racing of motor boats can be correctly considered a sport, but it is a great deal more than this, since it gives us comparative tests of efficiency under fixed conditions. The earlier stage of outboard motoring is still so recent that it is difficult for the average boatman to realize the changes and progress which have taken place in the last few years.

My own experience—and I am afraid I must make this story somewhat personal—dates from a few days before the Gold Cup Regatta in 1925. At this time the first of the new high speed outboard motors. (Continued on page 158)

weight were enabled to rise to the surface and glide over it. The planing of a boat involves motion over the top of the water and up to this time, all planing had been complicated by the need of first getting a considerable load into the required position.

In all forms of boat-



Crate, a simple type of hull with Bi*Plane bottom, which performed well at Palm Beach

Another Bi*Plane hull moving along without fuss



A Magnificent Boat Sales Salon

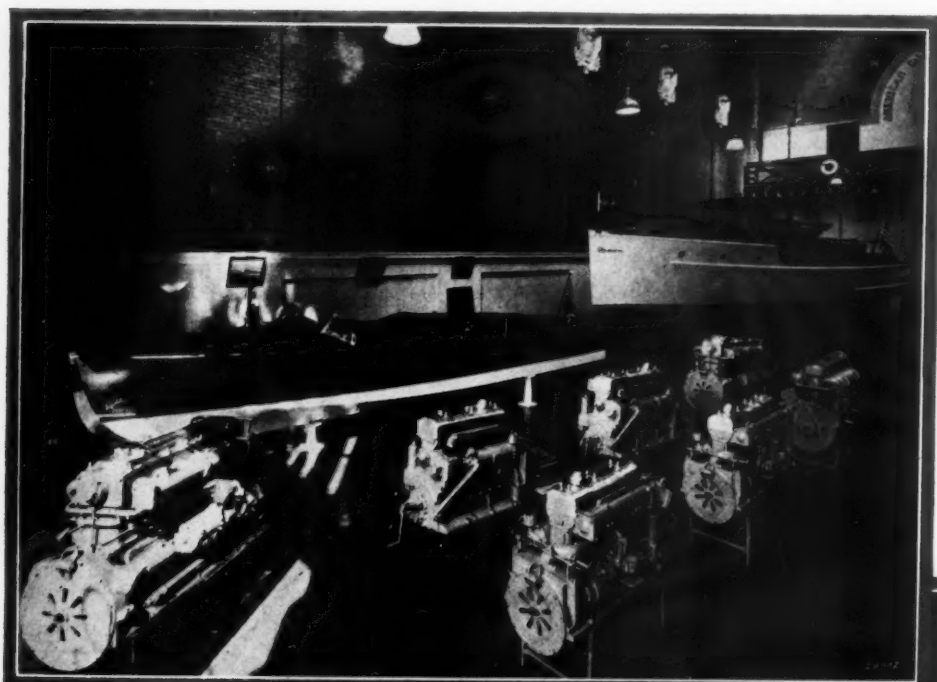
A. C. F. Cruisers and Hall-Scott Marine Engines in Permanent Show Room Displayed for Ready Inspection

NOT many years ago when a person became interested in the purchase of a boat it was necessary to resort to considerable effort before it was possible to complete a purchase. Boat builders realize that it is a much simpler problem to sell a boat when it can

the finest and most magnificent sales rooms for the exclusive sale of boats and engines which exist anywhere. This new show room is located in West 57th Street, New York, N. Y., in the heart of the high class automobile sales center. In this will be shown a complete display

of A. C. F. cruisers, Hall-Scott marine engines, and the Super Bear Cat runabouts. The room extends through the entire block, between 57th and 58th Streets, with entrances on both. The portion facing 57th Street has a floor space 50 by 100 feet, with a head room of about 60 feet. Since this space is not obstructed in any way by columns or other objects, boats can be in-

(Continued on page 142)



Interior of the A.C.F. marine sales room showing its magnificent proportions

be conveniently inspected and examined at the leisure of the purchaser. No longer will it be necessary for the purchaser to wade through long muddy roads to reach the boat builder's plant in order that he may see a boat. The builder has now assumed the burden of bringing the boat to the customer. In line with this more progressive and correct policy, the American Car and Foundry Company have established one of

The 47 foot cruiser has ample room to set it off well



Photographs by M. Rosenfeld

151 HYDROS *Beat* Mile A Minute

Mile Trials of Pacific Coast Hydroplane Association Result in Amazing Performances on Part of Little Racing Craft

By W. Mack Angas

Lieutenant Commander (C.E.C.), U.S.N.

THE highly successful and spectacular races for 151 class hydroplanes held in San Diego Bay last December created great interest along the entire west Coast. The regatta gave an impetus to racing in this section of the country which will undoubtedly lead to many interesting contests and the

No time was lost in submitting the scheme to the engineers of the Ryan Aircraft Company of San Diego who reported favorably on the idea and were commis-



Angeles I, owned by Harry A. Miller, which established a new record of 60.06 m.p.h. in January

construction of some remarkable racing craft.

When does a hydroplane become a hydro-airplane? is one of the questions which followers of the sport are asking after learning of the result of an experiment conducted by E. H. Rand, Jr., with his record breaking Miss Spitfire V. This experiment was held on San Diego Bay immediately after the close of the December regatta in which this boat won the Elgin Trophy for 1926. The idea that Mr. Rand tried out was the fitting of an airplane wing to the boat. The wing had lift enough to materially reduce the load which is normally carried by the two planes of Miss Spitfire's single step underbody when the little craft runs at full speed.

Shortly before the San Diego races and while the Spitfire team was on its way west rumors were flying thick and fast as to the boats which were being specially built for the regatta and the wonderful motors that were to drive them. Mr. Rand is nothing if not resourceful and the airplane wing idea occurred to him as a possible way of increasing the speed of his boat in case the westerners sprung something.



Janet II, driven by Lionel Barneson her owner. She was built by Ralph O'Berg

sioned to design and construct the wing and the gear which attaches it to the hull of Spitfire V. Though little time was available for the solution of such an unusual problem, the Ryan Company had the entire affair ready for preliminary tests shortly before the regatta. The



Frances-Marion owned by Fred Thompson of Hollywood, which had troubles and did not compete

legitimacy of such a device on a racing motor boat might be open to question and it was not used in the races. The way in which Miss Spitfire V broke records showed that she didn't need it anyway. After the regatta, however, the much discussed wing was put in place and Miss Spitfire V tried out on the carefully survey two and one

Sketch showing the method of attaching the wing on Miss Spitfire V



Photographs by Ray E. Chapin

half mile course used during the regatta previously.

Mr. Rand could not drive the boat, having injured his hand too severely during the day to permit his handling a steering wheel, but E. W. Hammond, owner and driver of Miss Westchester, volunteered to act as driver during the experiment. The Spitfires are raced as one man boats but the wing made a second member of the crew necessary, whose duty it was to crank the motor and then either jump overboard or crawl under the wing and take up a position on the after deck, hanging to anything available. By way of explanation to the uninitiated it might be stated that 151 class hydroplanes carry no such weighty and superfluous objects as clutches, reverse gears, electric starters, or even rear starters. An adventurous sixteen year old racing enthusiast, a son of Al Boyce, offered to do the cranking stunt and in a few moments Spitfire V was out in the stream. The motor responded suddenly

(Continued on page 172)



Esmaral III, owned by Secretary A. D. MacLeod of the Pacific Coast Hydroplane Association

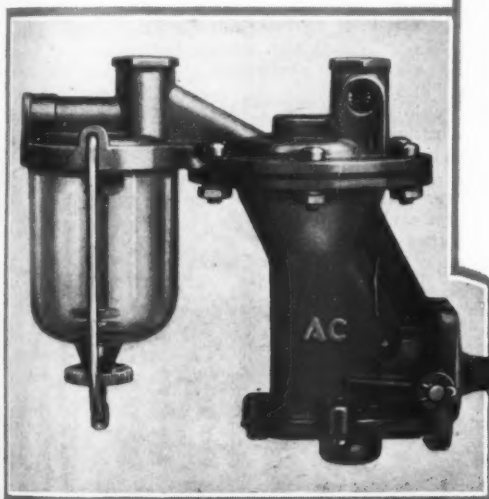
A Mechanical Fuel Supply System

A Simple Device Which Is Designed to Be Operated by a Cam on a Rotating Shaft Supplies Ample Fuel from Low Tanks

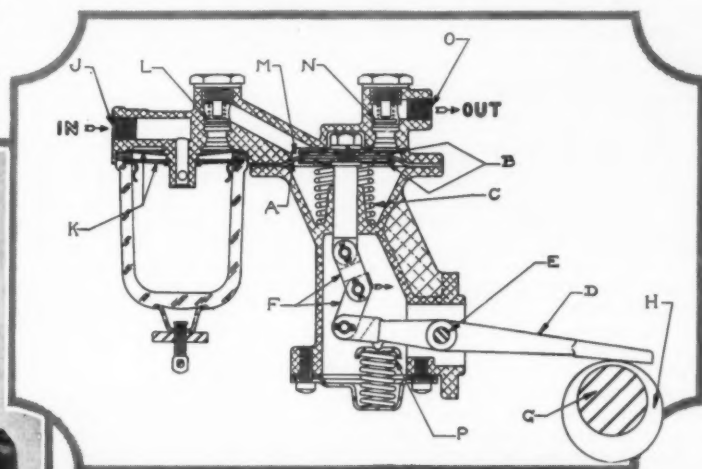
A MECHANICALLY operated fuel supply system has been developed by the A. C. Spark Plug Company.

This new device is about five inches high and four inches wide and is designed to be attached to the engine. It consists of a diaphragm pump which is operated by a lever driven from the push rods, tappets or eccentrics located either on the cam shaft

or any other rotating shaft. The pump sucks the fuel from the tank through a gasoline strainer, which is a part of the unit, before inducting it into the carburetor.

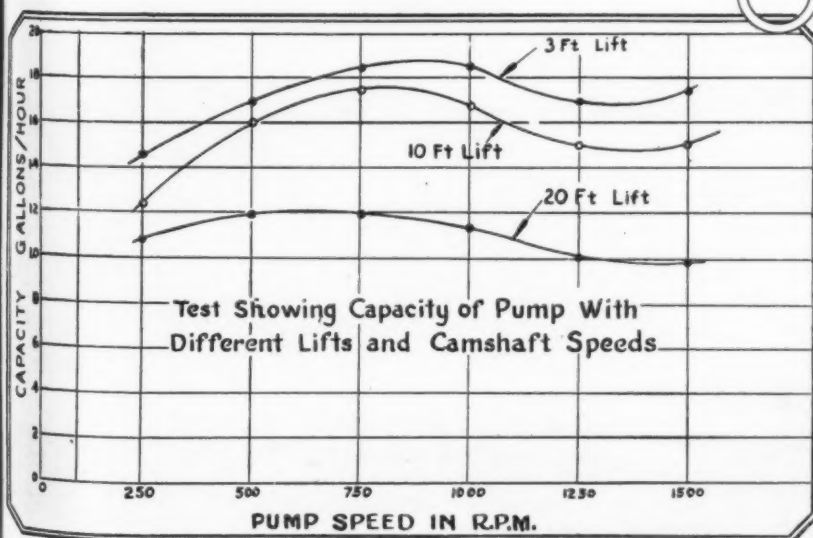
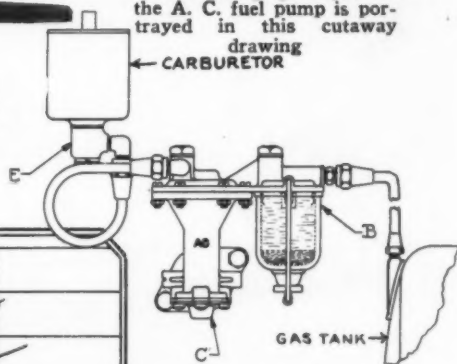


Exterior view of the A. C. fuel pump and gasoline strainer



The working principal of the A. C. fuel pump is portrayed in this cutaway drawing

The A. C. fuel pump hook-up in relation to the fuel tank and carburetor



The Company cites that several factors have been taken into consideration to give the unit long life and to make it practically free from trouble. First, the diaphragm and valves being of non-metallic materials, eliminates the problem of fatigue and wear. Second, the output of the pump is strictly in proportion to the

(Continued on page 96)

The capacity curves in gallons per hour with the A. C. pump at various lifts and engine speeds

A Fleet of Fast

The Houseboat Cruiser, a New Development In Speedy Motor Yacht Design Proves So Interesting That Several Have Been Built

ONE of the most interesting developments in motor yacht design in recent years, has been that of the houseboat cruisers, created by the Consolidated Shipbuilding Corporation, Morris Heights, New York.

The first of this new line of boats was Nashira, designed and built for Richard F. Hoyt, following which came Zingane II, for Edward Moore; Ardea for Harry Darlington; Kegonsa for Gerhard M. Dahl, and Vitesse for John A. Vietor.

All of these boats follow the same general plans of Nashira. The large deckhouse is retained in all of them. Ardea, however, was changed somewhat. The owner's quarters are forward with galley and crew aft. The pilot house completes the boat in a little more yachty appearance; but this is a matter of personal opinion. Otherwise boats as a class are identical save for a few minor changes made to suit the individual requirements and wishes of the owner.

In order to visualize the appeal of the design, it will be necessary to mention some of the outstanding features, bearing in mind the general dimensions: Length, 81 feet; Beam, 14 feet 6 inches; Draft, 4 feet; Speed, 28 miles per hour.

To find a deckhouse measuring 21 feet in length and about 12 feet 6 inches wide, in a boat of such length is indeed unusual. Its size, flooded with light, through large plate glass windows, lends itself to artistic decoration. The built-in furniture, consisting of combination ice box (electric refrigeration) and buffet; desk seats and bookcases, are unobtrusive. Their arrangement, design and careful execution precludes the unsightly effect

not unfrequently found in boats, especially where rooms are cramped and crowded.

In addition to the fixed pieces, two or three overstuffed chairs, extension dining table, six dining chairs, and one or two standing reading lamps, completes the furniture list. The interior finish is optional, paint finish, however, predominates, which allows for a warmth in combination with colorful hangings, and seat coverings, which is difficult to secure with conventional mahogany settings. For one whose tastes run to interior decoration the Nashira type boat offers opportunities that satisfy the most fastidious.

The owner's quarters aft consist of two double staterooms, and two baths, with entrances to aft cockpit and stairway forward to deckhouse.

Galley is located below bridge with service to butler's pantry on deck. Captain's room and crew's quarters are arranged forward.

The power plant consists of two 550 h.p. each Wright-Typhoon engines which develop a speed upwards of 28 miles per hour. The engine compartment is arranged below the deckhouse.

Vitesse is Speedway powered having two 300 h.p. each Speedway engines installed,



t Houseboats

giving a speed of $23\frac{1}{2}$ miles per hour.

Ardea, one of the most recent of this fine class of boats was built for H. Darlington, Jr., of Pittsburgh. This boat while generally similar in most respects, differs in some of the details. The large deck house, and the after deck are unusual. Similar to the other boats, the owner's quarters are forward, and consist of two double staterooms with connecting baths. Her power plant similarly consists of a pair of 550 h.p. Wright Typhoon engines, and she is also able to reach a speed of 28 miles with a comfortable cruising speed



Nashira, the first of the class designed and built for Richard F. Hoyt



Zingane II, another of the class built for Edward Moore



of 25 to 26 miles, without forcing the power plants. Not only have the designers and builders of these boats successfully balanced 1,100 h.p., with a sturdy 81 foot hull, but they have included fitments which have been previously found on much heavier and slower types of craft.

All of these boats have been built during the past two seasons. In 1927 several more will be added to the fleet of this novel type of boat, whose popularity is steadily increasing.

Ardea, built for Harry Darlington, but modified in some details



Wasp, the odd shaped hull driven by Elmer H. Johnson

ROARING REGATTA

*Honors in the 151 Inch Class
Go to the Pacific Coast, While
an Unusual Result Fails to
Determine Winner in Gold
Cup Class*



ME-2, winner of the Free-for-All

Start of the Outboard Free-for-All

OUT of the roaring, the barking, the plunging of a galaxy of speed craft at Palm Beach on Washington's Birthday and for two days before, have been born a number of matters pertinent to the nation's yachtsmen and boatmen.

Among these aforesaid matters, to be brief, are included such topics as the capture by the Pacific coast of honors in the 151 hydroplane class; the freakish outcome of competition in

Palm Beach

by
Gerry Swinehart

the 625 gold cup class; the win again this year by Commodore W. J. Conners in his effort to lay permanent hands on the Bradley Gold Challenge Cup, and frequent bursts of startling speed in other events.

Undeniably, California and the Pacific Coast were out for conquests when Dick Loynes of Long Beach first accepted the invitation of the Palm Beach Yacht Club to return to the southern battle ground again this year for a fracas in the Fifth Annual Regatta of the Palm Beach skippers.

For two months previous to the actual regatta, reports floated hither and thither that Loynes would reurn with Smiling Dan III, or that he would bring the famous Angeles I which broke the world's record with a speed of 60.11 on a straightaway at Balboa, Cal., on January ninth. It was with Smiling Daniel that the lad from

the sunset state sped to fame in the sensational competition at the Palm Beach Regatta a year ago.

But, lo! as time for the battle neared, it was learned that Loynes would be on deck with a brand new critter, Miss California, powered with a Harry A. Miller racing motor, and that Ralph Snoddy, who drove Angeles in her burst of speed, would accompany as mechanic. What would this new speed demon do? Thus the



Miss California, the sensational 151 hydro from the Pacific, owned by R. R. Loynes



Sister Miami, the Johnson powered winner of the Class C Baby Stepper class

Kenneth B. Van Riper of New York and Palm Beach, driving Alacrity won the Chris Craft race



cry went up from the fans.

Well, brethren, Miss California showed them! And, modesty to the contrary notwithstanding, she would have shown more except that a right cruel wave slapped her so severely during the mile time trials that she was forced to withdraw from her efforts to establish a new world's record and thus annex \$250 in gold which the Palm Beach Post had posted for this work.

But California was unimpaired until the morning of the third and last day. Thus it was that she was in shape to annex the first four of the five competitive heats in the class. And annex them she did with gusto. Indeed, it seemed

(Continued on page 184)

SMALL MOTOR BOATS

Their Care, Construction and Equipment

A Monthly Prize Contest Conducted by Motor Boatmen

Questions Submitted for the June Prize Contest

1. Describe and illustrate the construction of a boat house suitable for the protection of an open runabout of 35 feet or less with special reference to convenience in boarding the boat.
(Submitted by A. M. G., Westbrook, Conn.)

2. What ground tackle should the average cruiser carry and what information can you give on its use?
(Submitted by W. B. M., Newburgh, N. Y.)

Refinishing a Checked Canvas Deck

A Frequent Fault of Painted Canvas Decks May Be Remedied by Careful Work Without Requiring New Canvas

Answers to the Following Question Published in the February Issue

"How can canvas covered decks be refinished by either paint, cement or use of non-cracking materials of other kinds, etc."

Refinishing Canvas Decks

(The Prize-Winning Answer)

IT is presumed that the canvas is in good condition and lays without bad wrinkles, and that the real trouble is the bad crackings that make the deck look badly. It will depend upon the actual condition to determine the steps to be taken. If the alligatoring is not very bad, it will usually be sufficient to rub the entire surface with sandpaper glued to flat wooden blocks, until the high spots are worn down to the average level of the deck. Then carefully dust the hollows out and give them a very thin coat of white lead paint, and after about three or four days fill in the hollows with a soft mixture of white-lead putty, three parts white lead and one part putty by volume, carefully smoothing the surface to be level with the rest of the deck. Go over this work about every two days or so, and fill in or smooth off as the case may require after drying sets in.

After a good long spell of drying, sandpaper the deck completely, and give it one very thin coat of regular deck paint, brushed well into the canvas. Give it a sec-

ond and a third coat of the same paint, after allowing plenty of time for each coat to dry and being sure that the paint is quite thin. Do not put thick paint on the canvas again, but rather put as little on it as possible even though it may appear worn off in places, that is if you want to keep it from cracking as well as you can. Some people put several coats of heavy paint on the deck each season. This is too much.

Now, where the deck is so badly cracked that the above

method does not seem to be the one to use, the following is one that I have used successfully in such cases. Secure one of the good paint remover liquids and remove the paint from the canvas using a dull putty knife or scraper. The first time that I tried this I was afraid that the liquid would rot the canvas so I dipped a piece of canvas in the liquids and left it to dry, and then repeated this process for about ten times, but it did not hurt the canvas in the least. Hence the next Spring, I used it on a badly cracked canvas, and know that

it did not hurt the surface or texture of the canvas. After using the liquid, the decks were well washed off as the directions on the can require, and then they were sand-



FIG. 1
Chip off checks and paint blisters with a chisel



FIG. 3
Apply thick paint, stroking the brush in one direction only

A few of the simple tricks in removing checked paint from old canvas suggested by J. E. M.



FIG. 2
Using sandpaper over a block of wood makes it possible to save some elbow grease. Use No. 2 sandpaper

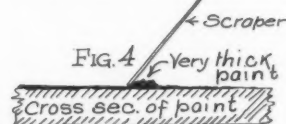


FIG. 4
When the surface is badly checked, use scraper to level off the paint. White lead putty may be used instead of paint.

Rules for the Prize Contest

READERS are urged to consider the above questions for the June issue, and send answers to them to the Editor, MoToR BoatinG, 119 West 40th Street, New York, N. Y. Answers should be (a) in our hands on or before April 25, (b) about 500 words long, (c) written on one side of the paper only, (d) accompanied by the sender's names and addresses.

The names will be withheld and initials used.

QUESTIONS for the next contest must reach us on or before April 15. The editor reserves the right to make such changes and corrections in the accepted answers as he may deem necessary.

The prizes are: For each of the best answers to the questions above, any article or articles sold by an advertiser advertising in the current issue of MoToR BoatinG of which the advertised price

does not exceed \$25, or a credit of \$25 on any article which sells for more than that amount. There are two prizes—one for each question—but a contestant need send in an answer to only one if he does not care to answer both.

For answers we print that do not win a prize we pay space rates.

For each of the questions selected for use in the following month's contest, any article or articles sold by an advertiser advertising in this issue of MoToR BoatinG of which the advertised price does not exceed \$5, or a credit of \$5 on any article which sells for more than that amount.

All details connected with the ordering of the prizes selected by the winners must be handled by us. The winners should be particular to specify from which advertisers they desire to have their prizes ordered.

S papered to a fairly smooth surface. The canvas was then wet with water and before it dried a very thin coat of deck paint was applied. This is one of the times that it is permissible to paint over wet surfaces. A second and third coat of paint were also put on fairly thin, after smoothing off the previous coats with sandpaper. These two methods will give good results.

Now as to the paint. I have used practically all kinds, but have found that the enamels for this purpose, and the flat colors ground in Japan to be covered with varnishes, and the common house paints not to be suitable for good wear. There are deck paints made, especially for canvas, and there is one canoe factory that uses a special paint finish on some of their canoes that are used for commercial purposes and not for show, these being rather good for canvas. Due to the flexibility of the canvas, any paint that dries hard and brittle is not suitable, but there should also be a flexibility in the dried paint also. White lead putty gives about the best crack filler for the purpose that you can get.

L. R. K., Philadelphia, Pa.

Taking Checks Out of Canvas

VERY rarely does the check in old and weather beaten paint extend through the film of the paint. Hence, if the greater part of the checking can be removed, there will remain an underbody that will be an aid to the life of the paint applied over it.

A sharp chisel handled with care will chip off the up-turned edges of the checks and leave a surface that sandpaper can be used upon without fast becoming gummed with easily removed broken down check edges.

Using sandpaper over a block of wood (Fig. 2) has several advantages—it levels off the surface, gives greater cutting power with less labor as well as making it possible to use up every square inch of the sandpaper. This can be done by simply turning over the block on its side and upside down. In the latter case less pressure must be used, otherwise the free edges of the sandpaper will turn over and break.

Use a stiff brush frequently while sand papering in order that the sand paper will (Continued on page 116)

Connecting the Shore and Boat

Useful Suggestions for Constructing a Runway Over the Low Tide Zone Which Can Be Removed for the Winter

Answers to the Following Question Published in the February Issue

"Describe and illustrate the construction of a portable runway extending from shore to float. The runway shall be designed for easy removal in the fall, and easy erection in the spring."

An Easily Assembled Runway

(The Prize-Winning Answer)

THE accompanying drawings show the construction of a light, substantial portable runway which may be taken down in the fall to avoid damage due to floating ice.

The runway is constructed in sections, which are bolted together, so as to permit erection and taking down with a minimum of effort and difficulty. The uprights are arranged in pairs with cross pieces and diagonal braces, well spiked together, forming a substantial frame.

The foundation for each frame consists of a box constructed of heavy planking, to which the frame is bolted.

The box is set in the ground and filled with rocks or sand. To prevent possible movement of the box, four heavy stakes may be driven into the ground along side of the box and then spiked to the box.

The spaces between the frames are spanned with floored sections bolted in place, and reinforced and stiffened with diagonal braces so as to prevent excessive vertical and horizontal movement.

The guard and handrails may be bolted in place with light bolts or they may be nailed in place.

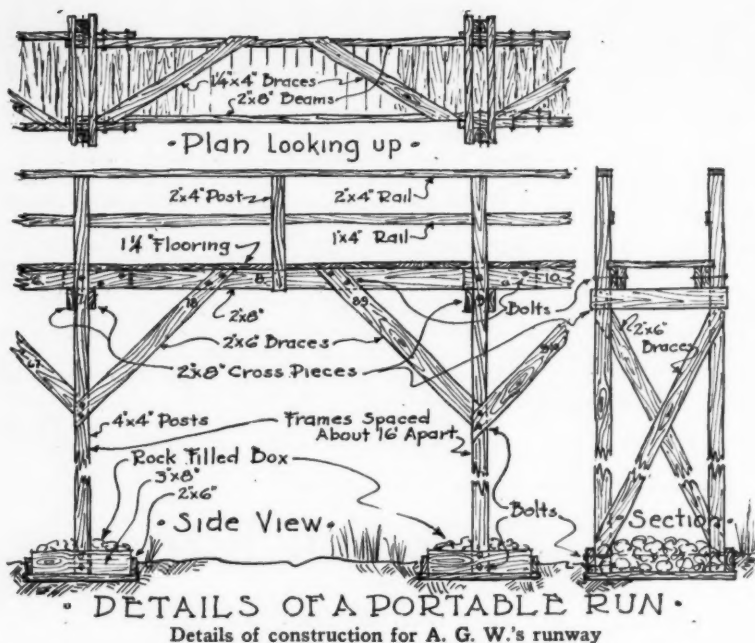
The bolts for the sections and braces should be not less than five-eighths inch in diameter.

At the off-shore end of the runway a well braced



A. G. W. has shown an acceptable form of runway from shore to deep water

• THE PORTABLE RUN •



double frame and an extra large box is indicated. This is to allow for the additional load and action of the gangway and float.

The float may be secured as indicated on the drawing. The inshore end is secured to the runway with two chains or cables placed diagonally. The offshore end is anchored with two anchors and chains. The anchor chains at the offshore end of the float should be secured to the bottom of the float and they should be quite heavy so as to drop down quickly so that they will not be fouled by boats coming to the float.

The material of the runway may be spruce, fir or pine. Pine is the strongest material. One and one-quarter inch thick material may be safely used for flooring for a runway up to three feet in width. If the width is increased a center beam should be provided.

When the runway is to be erected for the first time, either all necessary measurements may be taken and all boxes, frames and floor sections may be made up before they are set, or the boxes may be made and set, and the frames and the floors made to suit.

All frames, floor sections and loose braces should be numbered, as indicated on the drawing, so as to facilitate the erection in the Spring. In most cases the boxes would not be disturbed by the ice and they may be left in place. Then they do not need to be numbered.

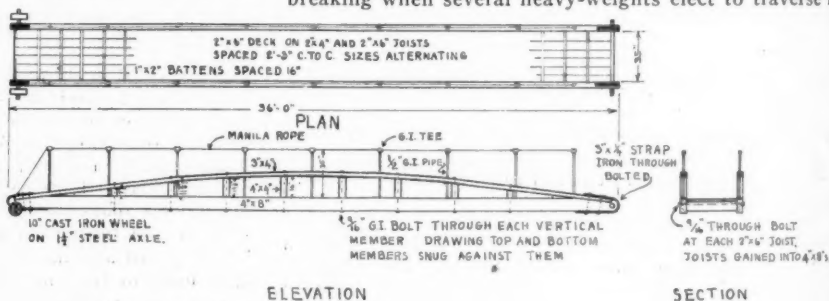
In order to have the runway last a long time, all parts above the water should be painted at least two coats of lead and oil paint. All posts and braces below the water should be painted with two coats of brown copper paint.

All bolts should be greased with heavy grease to prevent rust and thereby help the disassembling and assembling process.

A. G. W., College Point, N. Y.

Lightness and Strength

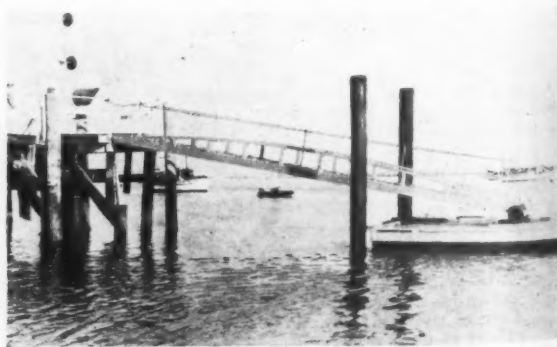
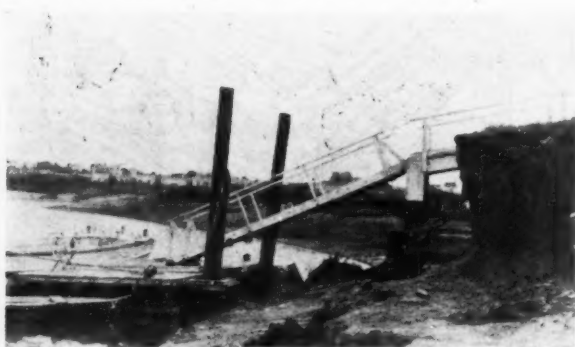
IN the design and construction of a walkway or gangway leading to the landing float the most important consideration, next to the self evident ones of sufficient length and width, are lightness and strength. The gangway must be light in order that it may be readily handled at the beginning and end of the season, and it must be strong enough to avoid danger of its breaking when several heavy-weights elect to traverse it



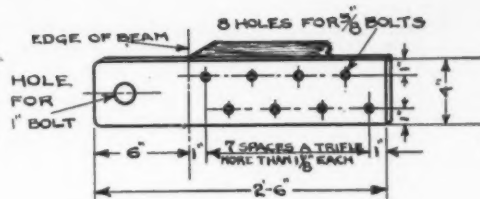
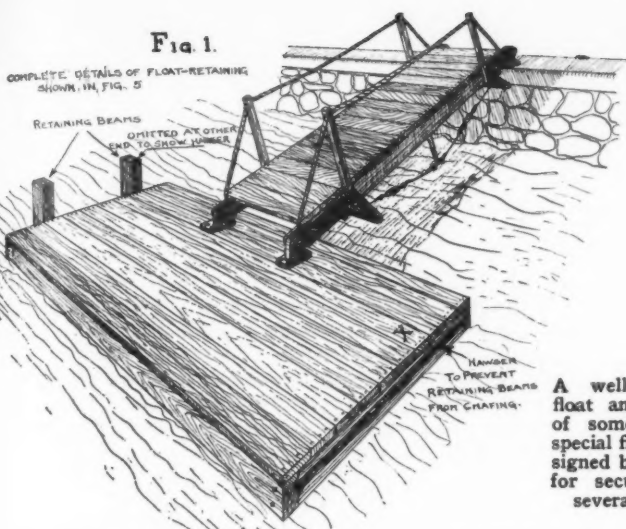
NOTE-- ALL BOLTS 3/4" G.I.
ALL LUMBER DOUGLAS FIR S. & S.
EXCEPT BATTENS WHICH ARE OAK.

W. M. A. has designed a stiff gang plank of light construction

in close formation. The question of strength brings up another desirable feature which is stiffness. A long slender beam will bend alarmingly if loaded heavily near the center without necessarily being in any great danger of breaking. The gangway leading to the landing float must not only be strong but it must be stiff enough to feel strong, especially as it will be used by women and children. In order to combine lightness, strength, and stiffness, the main longitudinal members of the gangway



At left a short runway and a longer one at the right, both described by W. M. A.



MAT. $\frac{1}{2}$ WROUGHT IRON, 3 REQ.

FIG.-2.

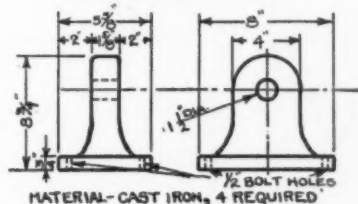


FIG.-3.

should be trusses or trussed beams. The accompanying drawing and photograph show a gangway carried by trusses of the bow string type without diagonal members in the panels. With the short, heavy verticals used, and

gangway as described hereinafter and as illustrated by the accompanying drawing and photograph. The gangway shall be complete and installed ready for use even though all necessary parts are not covered in detail by the drawing and specification.

Materials and Workmanship shall be of the best commercial grade unless other grades are specifically called for.

Lumber shall be number 1 common douglas fir surfaced four sides except that the battens on the deck shall be of oak.

Woodwork Trusses shall be framed and assembled as shown. All joints shall be cut true and drawn up tight with the 9-16 inch bolts which run through the centers of the verticals as shown. Lengths of the verticals shown on the drawing are to be measured along the center lines of these members. The top chord is to be rabbetted in-

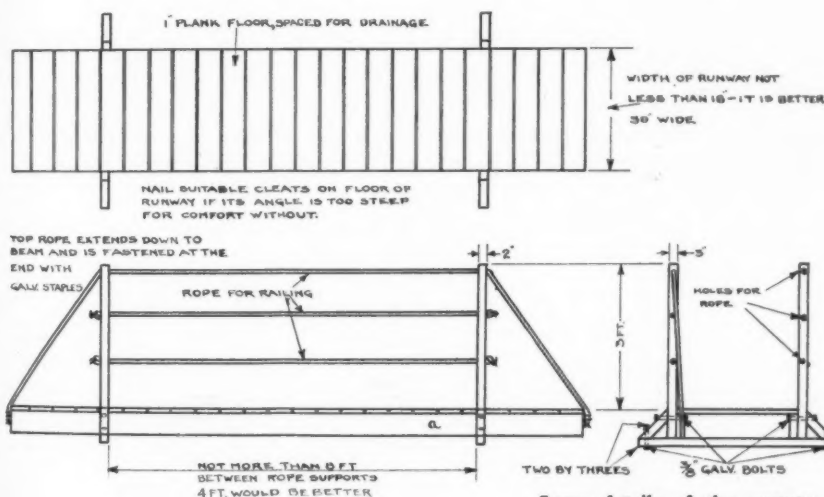


FIG.-4.

Some details of the runway by A. M. G. which is limited however to a short span

the rigid connections provided, the diagonals will be found unnecessary, although theoretically desirable. If they are used in a longer and deeper truss they should take the form of X bracing in all panels but the end ones.

The gangway must be long enough so that it will not be too steep at low tide. If the dock is four or five feet above high water and there is a five or six foot tide, a length of from thirty feet to forty feet will be required. The gangway shown is 36 feet long and 35 inches wide between the trusses. This width is wide enough to permit the passage of a man heavily loaded with packages, and will permit two people to pass each other if necessary; but is too narrow, as it should be, to encourage people to walk down it abreast. Specifications for the gangway shows are as follows:

General Intention. It is the declared and acknowledged intention of these specifications to cover the construction and installation of a

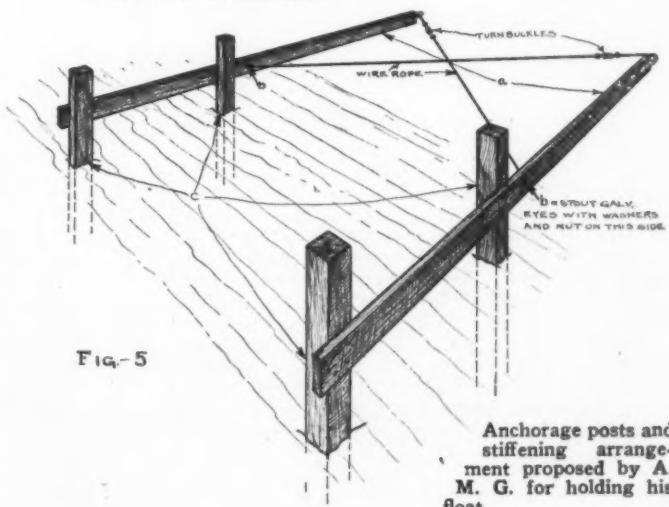


Fig-5

Anchorage posts and stiffening arrangement proposed by A. M. G. for holding his float

to the ends of the bottom chord as shown, and secured by a strap iron bolted around the ends of the members as shown. Top and bottom chords shall each be in single lengths. Splices in these members will not be permitted. Floor joists are to be spaced as shown and shall be alternately 2 by 6 inches and 2 by 4 inches with 2 by 6 inch joists at the ends of the gangway. The joists shall be gained into the bottom chords of the trusses to a depth of $\frac{3}{4}$ inches. A 9-16 inch bolt shall be run right through the gangway from side to side at each 2 by 6 inch joist drawing the bottom chords of the trusses snugly up against them. Decking is to be 2 by 6 inches, fastened to the joists with 4 inch spikes. Battens to be fastened with galvanized wire nails.

Fastenings and Iron Work. All fastenings are to be

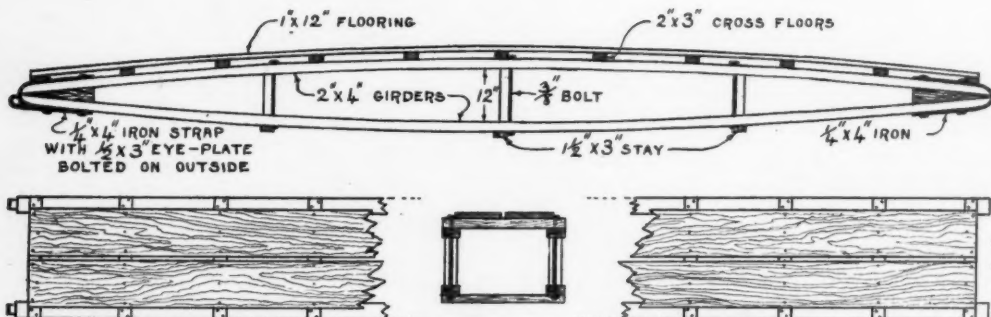
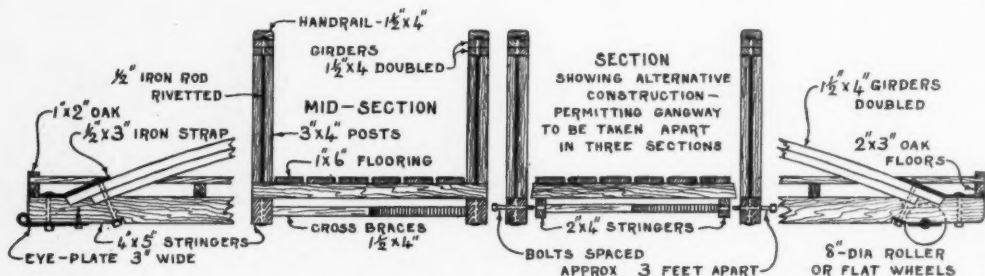
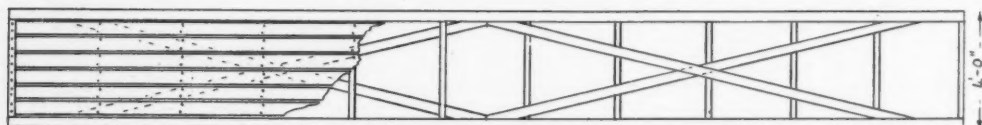
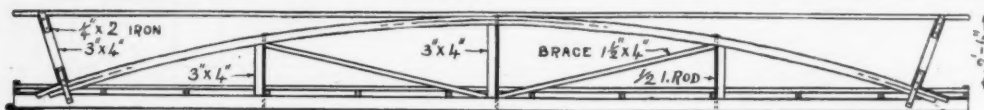
the deck of the landing float for the wheels of the gangway to run on. They shall be long enough to cover the normal travel of the wheels, and shall be 6 inches wider than the face of their tread. One-half inch galvanized iron pipes shall be set into the trusses and secured to the lower chords with flange pleats as shown, to act as the verticals of the hand rail. Galvanized iron T's shall be fitted to these pipes as shown.

Rope Hand Rails as shown in the photograph shall be installed. The rope shall be manila, $\frac{1}{2}$ inch diameter.

Painting. All woodwork shall be painted a priming coat of white lead and raw linseed oil after being framed and before assembly. Joints shall be bedded in a second application of thick lead and oil. After assembly the completed gangway shall be painted two coats of

ready mixed paint of selected color.

W. M. A., San Diego, Cal.



A well braced gang plank in both a long span and short span types designed by A. N.

galvanized iron including bolts, nuts, and washers. All nuts shall be set up on suitable washers and the ends of all bolts shall be upset to prevent the nuts slackening. Wheels and axle shall be as shown. The axle shall be attached by suitable $\frac{1}{4}$ inch galvanized strap iron hangers 3 inches wide, bent over the axle and bolted into place. The wheels shall be retained on the axle by large cotter pins. A $1 \frac{1}{2}$ inch iron bar similar to the axle shall be passed through holes in the upper, or shore end of the trusses and through $1 \frac{1}{4}$ inch eye bolts which shall be set into the pier under this specification for the attachment of the gangway. Cotters shall be fitted into holes in the $1 \frac{1}{2}$ inch rod to prevent its working out endways. Steel plates $\frac{1}{4}$ inches thick shall be attached to

longer or shorter, and if this is done, the sizes of the scantlings should be increased or reduced proportionately.

The drawings are detailed sufficiently to work from, and a man handy with carpenter tools should find little or no difficulty in turning out a very creditable job. The iron work has been kept as simple as possible, the eye-plates can be purchased ready made in most places, the rod-iron can be threaded on the ends, and pulled up tight with nuts and washers, instead of riveting, if that is thought best.

Spruce is very excellent material for this kind of construction. Select good, clear material, especially for the stringers and girders. Yellow pine is good also, but it is heavy, disadvantage in

(Continued on page 98)

A Girder Type Gangway

As a means of communication between landing float and shore, the conventional girder style of gangway seems to best meet the requirements. The girder construction combines lightness and stiffness; two very desirable qualities in a portable gangway. Two different designs are shown, one a substantial 30 foot gangway, suitable for a club float, where there is considerable traffic, and the smaller one, better adapted to a small private float. It is not necessary to hold to the exact lengths given, these are intended as examples. Either gangway can be built

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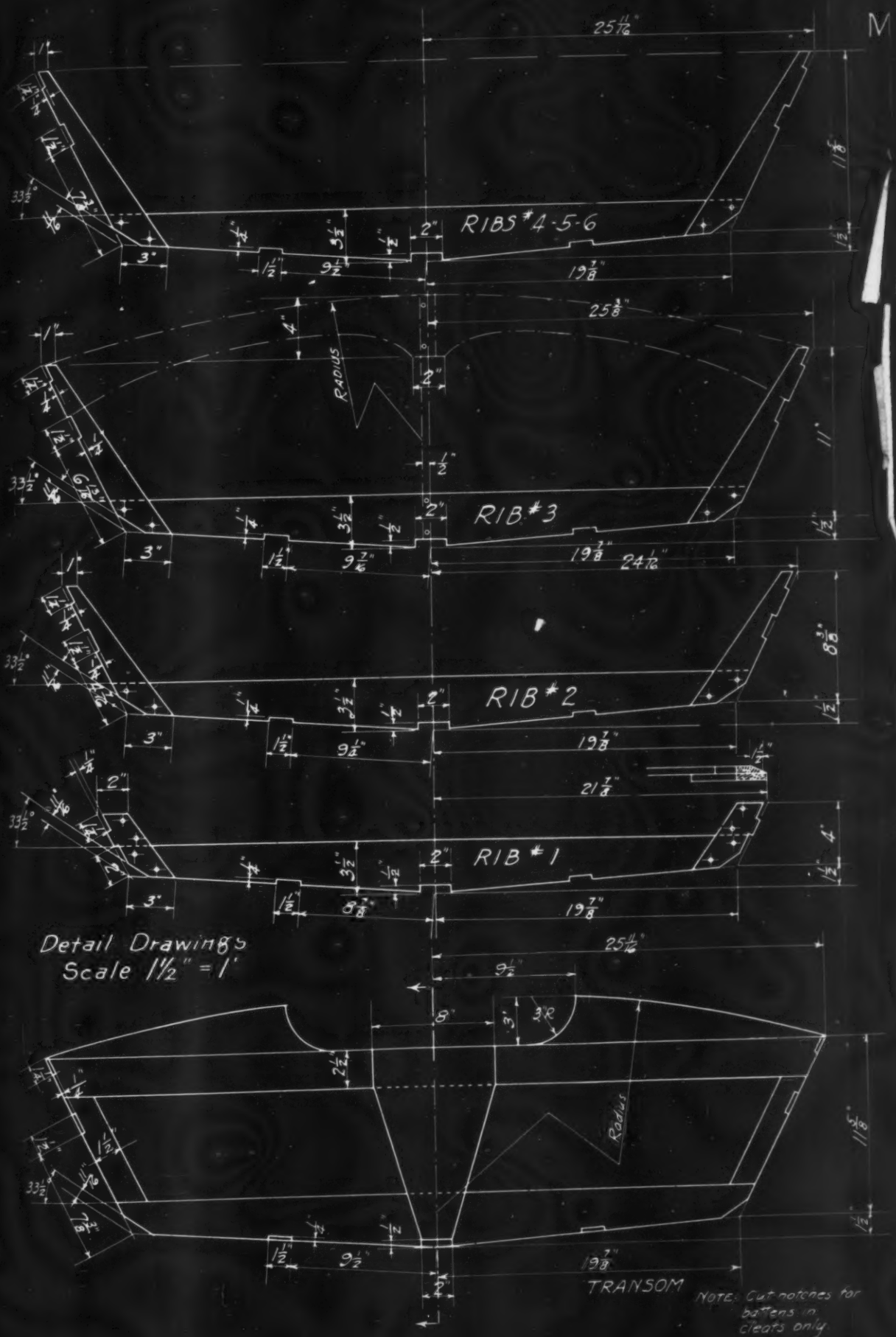
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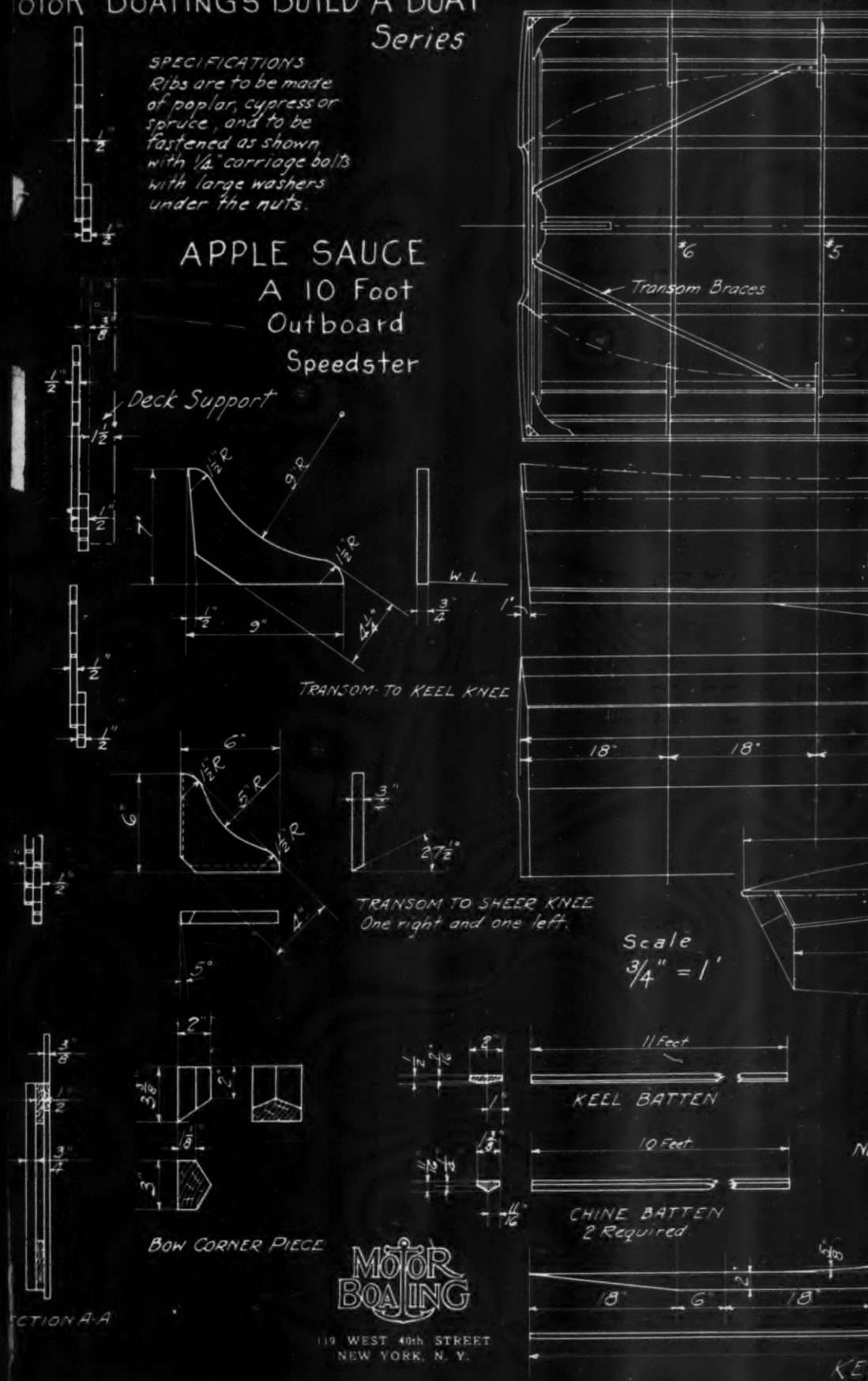
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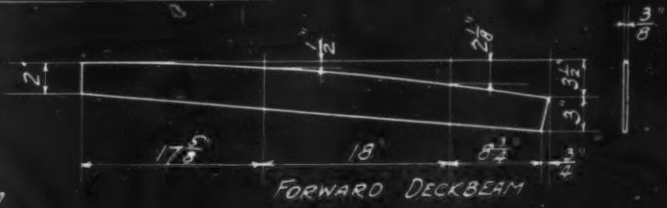
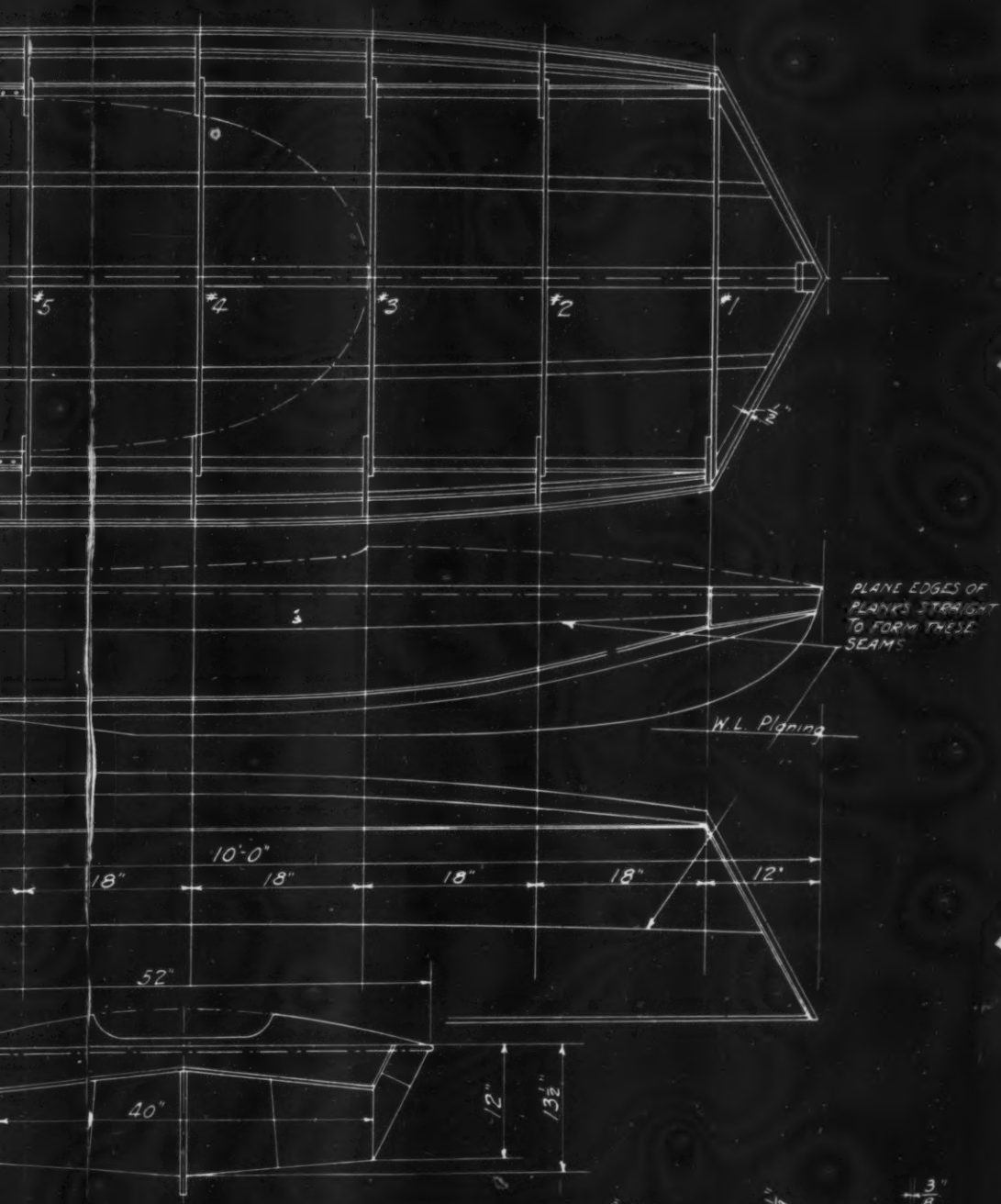


MOTOR BOATING'S BUILD A BOAT Series

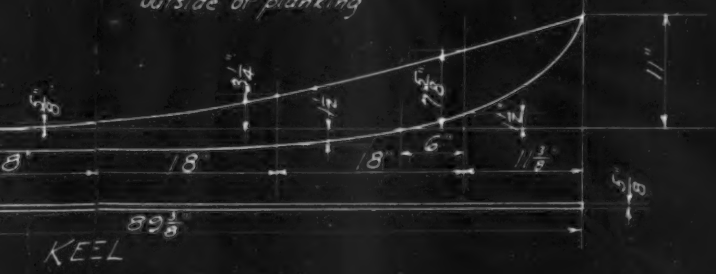
SPECIFICATIONS
 Ribs are to be made of poplar, cypress or spruce, and to be fastened as shown with 1/4" carriage bolts with large washers under the nuts.

APPLE SAUCE A 10 Foot Outboard Speedster





NOTE: Keel is fastened on outside of planking



Designed by
F. T. IRGENS
Chief Engineer
LOCKWOOD MOTOR CO



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APPLE SAUCE

A Fast Little Speedster

A Clever Design and Building Instructions for an Inexpensive Little Outboard Boat Which Any One Can Build

By F. T. Irgens

Chief Engineer, Lockwood Motor Company

SPEED and continually more speed is the demand of the outboard motor enthusiast these days. Designers have been producing new types and styles of little boats intended particularly for outboard motor propulsion in large numbers. The design presented herewith represents the result of much experimental work, and is a most successful little boat for its purpose. When equipped with any of the modern 4 h. p. outboard engines, it will easily do 20 m.p.h., and is also able and seaworthy considering its type and size.

The idea underlying the preparation of this design is to permit the outboard motor enthusiasts to construct an inexpensive and speedy craft. With this thought in mind, the designer has arranged his materials so as to eliminate difficult carpenter work, and permit the boat to be constructed with simple and ordinary tools. The addition of the dummy keel gives the boat the appearance of a Vee bottom craft, and also gives it exceptional maneuvering ability. This keel has not the disadvantages of the flimsier metal fin. By carrying the Vee bottom all the way to the transom, all of the bottom sections of the ribs are identical, and the boat will bank nicely when rounding a turn.

The success of any small boat of this type depends to a great extent on the care with which the design is followed. Weight in a small boat like this is also a vital factor, and care should be taken that no materials are introduced which will materially change the weights over those specified. It is recommended that no alterations of any kind be made by amateur builders as the experimental and research work has been performed very carefully by the designer. Attempts on the part of unskilled boat builders to improve on the design will probably result in failure.

The construction of the boat is most conveniently carried forward if it is built upside down. As a preliminary a base should be prepared consisting of two 2 by 6 inch planks about 10 feet long. These are placed on the floor edge up, and spaced 3 feet apart. They should be leveled off on the top surfaces and care should be taken to see that they run parallel. The next step will consist of marking off each of the frame stations on these planks, and the securing of a couple of cleats to the ends of the planks, which are to locate the transom at the proper angle. The detail drawings give the necessary data for preparing each of the six different rib assemblies which should be sawn out of the proper size material. The several parts should be carefully prepared and screwed together after which a piece of board can be secured across

the top edges of the frames, taking care to see that the edge of the board is straight and flush with the tops of the ribs. The frames can now be fastened to the base planks in their proper position and upside down, remembering that the boat is to be built this way. The next operation will be to screw fasten the keel batten, chines, ribbands, and seam battens securely to the ribs and transom, and then fasten the forward corner piece or stem to the keel batten. The transom to keel knee should then be assembled with screws running through the transom and the keel batten, while the bow pieces are fastened to rib number 1, and the bow corner piece. If the notches for the seam battens are cut as shown on the drawings, the seam edges of the planks will be perfectly straight, which will eliminate much fitting along these joints.

In planking the boat, the sheer planks should be applied first, permitting the straight edges to overlap one-half of the seam batten. The planks must be securely screw fastened to each of the several ribs throughout the boat. The next planks to be applied are the lower side planks, and these should be trimmed down flush with the chine after they are fastened. The next operation will be the fitting of the bottom keel planks along the keel batten, and care should be again exercised that the straight edges of the planks overlap one-half of the seam batten. The last planks to be applied are the bottom chine planks which should be fastened into place in the same manner as the others. All joints should be made with a strand of cotton laid in marine glue between the surfaces for water tightness. The hull can now be taken from the floor by raising the two base planks, and after these are removed the hull planks should be nailed to the seam battens from the outside, and the nails clinched on the inside. The transom-to-sheer knee should now be securely fastened with brass screws of the proper size, and the transom braces attached. It is very important that the transom be securely braced, and the tubular struts shown on the layout must be securely fastened to the middle of the transom close to its upper edge, and also to the chines close to rib number 5. The keel is fastened to the hull with long screws which go through the keel batten from the inside. When the deck beams have been assembled, the temporary brace boards across the tops of the ribs can be removed, and the hull can be considered finished. Among the final operations would be the proper sandpapering and varnishing or painting of the hull, both inside and out. Some materials will lend themselves better to a bright varnish finish, while others

(Continued on page 98)



HULL SHOWN IN PLANING TRIM

Outboard profile of the 10 foot outboard speedster Apple Sauce

Yard and Shop

Notes of Interest to Both Owner and Manufacturer

Cutless Bearings Described

A NEW publication has been issued by the Goodrich Rubber Company, which describes in detail the several types of Cutless rubber bearings which this company supplies for marine work. The bearings, as is well known, are lubricated by water and are so manufactured that the rubber bearing surface is backed up by a substantial bronze shell which serves to permit fastening and securing the bearing to the boat's structure. Rubber as a material for bearings has a very low coefficient of friction when wet. The application of this principle to the marine field has resulted in greatly increased life in the bearings, and also a reduction in vibration and other faults of the earlier types of bearing. Readers who are interested in this new material will find it worth their while to write to the B. F. Goodrich Company at Akron, requesting a copy of this booklet on Cutless Rubber Bearings.

A Boat Show In Chicago

We are advised that the Fifth National Outdoor Life Exposition will be held again this year at the Coliseum in Chicago, during the week of May 9 to 14. This Show will feature quite a number of motorboat and engine exhibits among which the outboard engines and boat builders will take a prominent part. In addition a special effort will be made to inform the traveling public where they can spend their vacation time to the best advantage from both a travel and recreation point of view. Naturally the use of boats and marine engines will help to provide enjoyment to many residents of Chicago after becoming acquainted with these at this Show.

Belle Isle's Show Room

The Belle Isle Boat & Engine Company have opened their new motorboat show room in Detroit at 500 East Jefferson Avenue. They will show here a complete line of A. C. F. cruisers, as well as the famous Bear Cats which they build themselves. In addition a complete assortment of fast runabouts, row boats, and outboard motor boats and engines will be shown.



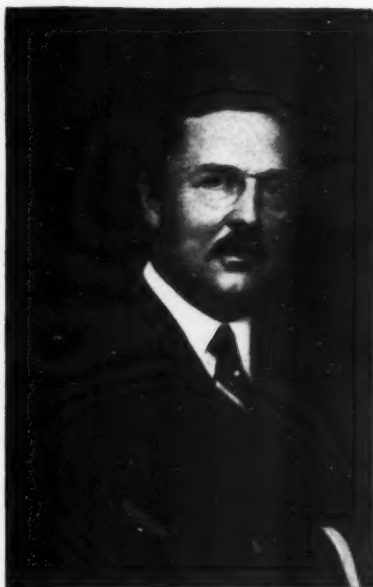
A lively runabout owned by H. F. Mussig, and which is powered with a model 251 Continental Van Blerck marine engine. It is stated that the speed of this boat is from 28 to 30 m.p.h.



The 37 foot runabout Horace, which was designed by George F. Crouch, and built by the Horace E. Dodge Boat Works, and is powered with a Wright Typhoon engine

John Wells to Move

John H. Wells advises that the firm of John H. Wells, Inc., now located at Forty-fifth Street and Madison Avenue, will remove to new quarters



Benjamin Carpenter, head of the marine supply house, George B. Carpenter & Company, who died in Chicago on February 23

on May 1st. Due to the increased volume of business it was found necessary to secure larger accommodations and Mr. Wells has been contemplating a change of quarters for over a year. After much consideration and inspection of many buildings Mr. Wells selected the new Hale

Building at 7-11 East 44th Street (near Madison Avenue) as being the most desirable. Their phone numbers will not be changed, however, remaining Murray Hill 3126-3127.

The many friends of Mr. Wells and his associates are invited to call at their new quarters after May 1st, 1927.

Father and Son Race Chris-Craft

Word comes from Arthur J. Utz, Manager of Chris Smith & Sons Boat Company, National Sales Offices and Showrooms in New York, advising that T. E. Mitten, Rapid Transit System owner of Philadelphia and his son Dr. A. A. Mitten, have both placed their order for Chris-Craft Cadets.

These boats will be shipped to their summer camps on Long Lake in the Adirondacks. Both boats will be powered with 6 cylinder 100-125 h.p. Junior Gold Cup Scripps Marine motors which will push these craft close to 35 m. p. h. They will have identical equipment throughout, including one man tops for forward cockpits, rear cockpit covers, spot lights, cigar lighters, clocks on dash, etc.

We are sure that father and son competition is going to spread from the Golf links to the blue waters of Long Lake after both power plants have been loosened up.

J. B. Farr Visits Florida

J. B. Farr, President of the Kermath Manufacturing Company, has recently returned from an extended trip through Florida. While there he attended the Palm Beach Regatta in which a number of the cruisers and runabouts entered were Kermath powered. He took with him the factory Service Manager and together they covered all the Kermath dealers in Florida providing them with expert information as to the service and upkeep of Kermath motors in their respective territories. The reaction to such a plan was a very favorable one on the part of the dealers who are frequently confronted by problems of service management and this closer cooperation was keenly appreciated.

(Continued on page 58)

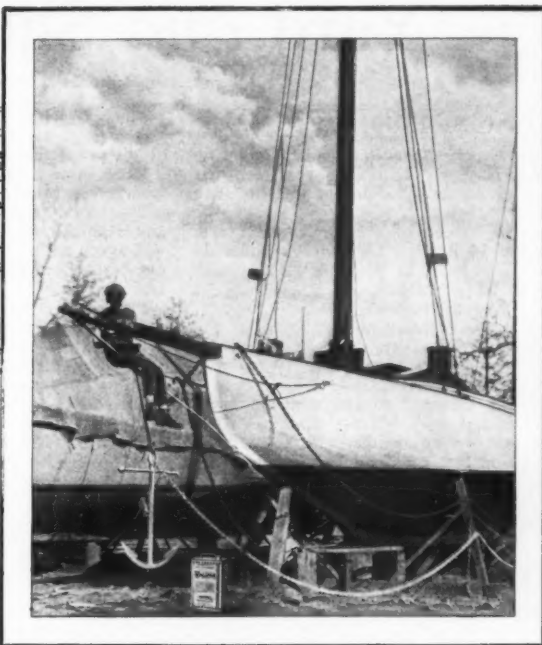


Sea Fever

I must go down to the sea again
for the call of the running tide;
It is a wild call and a clear call
that may not be denied.

And all I ask is a windy day
with the white clouds flying;
And the flying spray and the brown spume
and the sea gulls crying.

—JOHN MASEFIELD



For spars and all bright work—Clear Valspar!



Photo by
H. Armstrong Roberts

Down to the Sea in Ships



Valspar Yacht White
for hulls

Photo by M. Rosenfeld

better even than last year. In this rejuvenation Valspar always plays a most effective part.

All yachtsmen know Valspar—the famous waterproof varnish. It is used wherever ships sail the seven seas, to preserve their beauty in spite of water and weather, sun and fog.

For hulls, there's nothing finer

"Sea Fever" is upon us. And with it the desire to get our boats in spick-and-span condition—to make them look a little

than Valspar Yacht White (or Black) which covers so smoothly and flows so easily that it's a satisfaction to work with it. And you know its color is permanent!

Then there's Valspar Bronze Bottom Paint, a truly remarkable protection for bottoms.



Bronze Bottom Paint—for bottoms

Photo by Edwin Levick

Valspar Bronze will keep your boat free from barnacles all season, eliminating all need for a mid-season cleaning.

And finally, there's Valspar Varnish-Stain (Valspar in transparent colors), Valspar Enamel (Valspar in solid covering colors), Valspar Gold and Valspar Aluminum. All possess Valspar quality and integrity. Use Special Offer coupon for sample.



Calk her up!

Photo by H. Armstrong Roberts

This coupon is worth 20 cents to \$1.60



The Varnish That Won't Turn White

VALENTINE & COMPANY
460 Fourth Ave., New York

M.D.-4-25

I enclose dealer's name and stamps, amounting to 20c for each 40c sample can checked. (Only one sample of each product per person at this special price. Write plainly.)

Dealer's Name

Address

Your Name

Address

Valspar . . . ☐
Valspar Bronze Bottom Paint ☐
Aluminum Paint ☐
Gold Paint . . . ☐
Yacht White . . . ☐
Yacht Black . . . ☐
Valspar-Enamel ☐
State Color . . . ☐
Valspar-Stain . . . ☐
State Color . . . ☐

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

Yard and Shop

(Continued from page 56)

The Gold Cup Program

The program of the next series of races for the Gold Cup will be held by the Indian Harbor Yacht Club at Greenwich on August 6. The various events as scheduled at this time are as follows:

- 2:00 P. M.—Outboard motors, three miles, two classes.
Class A (under 14 inches) for Juniors under 14 years of age.
Class B (14 to 20 inches).
Class C (over 20 cubic inches).
2:30 P. M.—26 foot stock runabouts, six miles. Open to any standard make of 26 foot runabout of which the manufacturer has built more than twenty-five. Motor not over 650 cubic inches.
One cup will be awarded to the winner of the event, and additional cups for the winners of the individual classes, to be divided either by horse power or make of boat as seems best to the Committee. The committee will have full power in the matter of ruling out any boat which, in the opinion of the committee, does not seem to be an actual stock boat.
2:55 P. M.—First heat of the Gold Cup race, thirty miles.
3:50 P. M.—Races for 151 inch hydroplanes, six miles.
4:10 P. M.—Second heat of the Gold Cup race, thirty miles.
5:00 P. M.—Races for 151 inch hydroplanes, six miles.
5:30 P. M.—Third heat of the Gold Cup race, thirty miles.

New Propeller Booklet

The Columbian Bronze Corporation, Freeport, L. I., have found it necessary to republish their well known booklet called Columbian Bronze Propellers in a Nut Shell. This book gives much valuable information on the selection of suitable styles and types of propeller, together with illustrations of the many different type wheels built by this company. There are also many pages devoted to tabular data on the performance and ability of propellers of different sizes, together with tables of speeds and similar data. Copies can be secured from the Columbian Bronze Corporation, and everyone who is interested in improving the efficiency of his boat by propeller performance should secure a copy.

Percentages May Be Misleading

"Percentages may mean much or little—sometimes they mean nothing at all," says Geo. W. Codrington, vice president and general manager of The Winton Engine Company.

"In fact many statements of a general character regarding a percentage of this, or a percentage of that, when analyzed, are found to convey ideas and inferences very much at variance with the facts. I refer particularly to advertising claims of this kind.

"It means little to a motor car buyer to be told that seventy-five percent of all the fine cars in American use a certain carburetor, unless that buyer knows what cars the advertiser included in his list of fine cars one make of car not strictly within

the fine car class may be included, and, because of big production of that particular car, swell the percentage as claimed out of all proportion to the actual facts.

"The same holds true for any advertising claim of this kind, whether it refers to hats, shoes, furniture, motor cars, motor boats, yachts, marine engines or something else. And I believe any reputable yacht builder, designer, or marine engine builder will agree with me when I say that such claims are just as much out of place in the marine field as they are in any other line of business.

"Recently claims of this kind have been made regarding the percentage of newer and finer yachts that are being powered with a certain make of Diesel engine. Newer and finer is a relative term debatable as to its limits, and something on which unanimity of opinion as to its scope could never be secured. In other words, here we have a statement of percentage based on something that cannot be determined accurately. This alone makes the statement worthless.

"The Winton Engine Company has a special interest in any claim of this kind. The position of leadership that Winton Diesel engines have won for themselves in the marine field carries with it a very definite responsibility on our part. Consequently, when unwarranted and extravagant advertising claims of this kind are made, we feel that we are justified in taking exception to them publicly, for the protection of users of Winton marine engines.

"To any man interested in the subject, we suggest that he take such claims with a grain of salt and that he get the facts in detail. He will find, what is quite generally known in the marine industry, that by far the greater number of American Diesel yachts are powered with Winton engines."

For That Bright Work

One of the routine jobs on every well kept yacht is the daily polishing of the brass throughout the boat. This is something which must be done in order to keep the boat trim and shipshape, and in order to do this at the least expenditure of effort a good metal polish is essential. Solarine prepared particularly for work of this kind is made by the Solarine Company of Baltimore, and keeps all metal parts looking like new. In addition, Solarine has the property of covering the metal surfaces with a protecting film that withstands the action of salt and weather to some extent. The composition of the polish is the result of years of study and experiment and it will remove tarnish and stains from all metals easily and rapidly. It is supplied in screw top cans in all sizes up to a gallon.

An Interesting Note

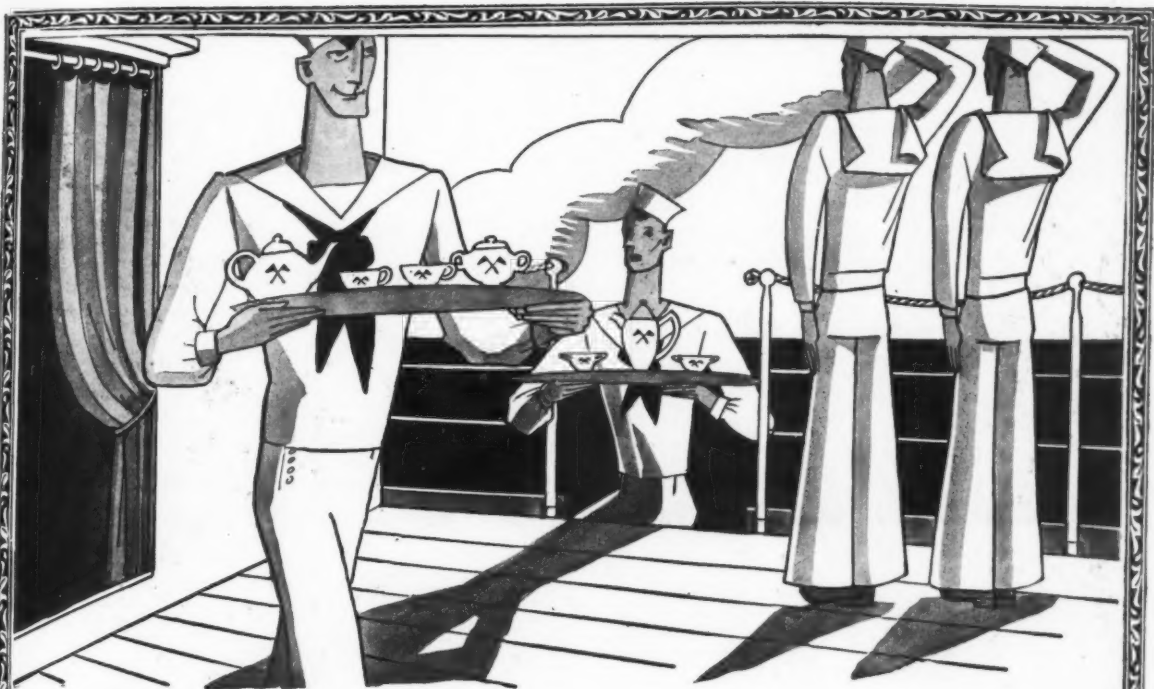
The Anderson Engine Company of Chicago received from a contented user of one of their engines, a request for a new cylinder head gasket, and a paragraph of comment in his letter is of interest. "You might be interested to know I have had this engine since June, 1923, I have not spent one nickel on repairs, nor had occasion to open up the engine. I have simply given it gasoline and oil, occasionally putting kerosene in the cylinders to cut the carbon. In the winter I drain off the water, and put oil in the cylinders. In the Spring I change oil, clean the strainer, and we are off for another season. However, this is too good to go on forever so I intend to carry a spare gasket so that I may have it on hand if needed."

(Continued on page 85)



(Cy. Latour Sport Picture Service)

The comfortable interior of the Tri-State Yacht Club's quarters at Essington, Pa., which under the leadership of Commodore Charles Walber and an able crew, has grown to be one of the leading clubs in the Philadelphia district



All hands on the topsides, Bos'n, man the rails for an Ovington China Service!

SMARTLY, bos'n, smartly. And smartly it is when a sea-going bos'n gets the word that Ovington's china is coming aboard. For this is china made to the sea—china to weather the winds and the waves—china that serves the smartest yachts that range the seven seas.

What are the findings in your own case, Commodore? Everything shipshape? Any derelicts in sight? Better sound inspection

and if your china and crystal fail to pass muster, break out your charts and plot your course for Ovington's.

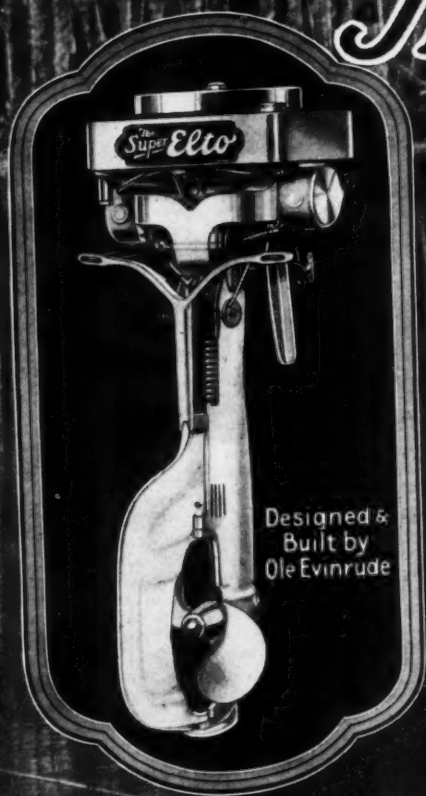
For as little as \$100 you can give your good ship a china service of which she may well be proud. For as little as \$100 you can have a service for six emblazoned with your own flags. Crystal sets cost even less. And it will be a gala day when your good service is piped in honor to your galley.

436 Fifth Avenue
New York

OVINGTON'S

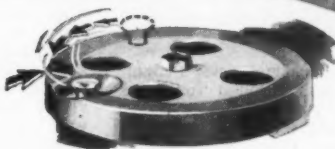
212 North Michigan Blvd.
Chicago

The Sheer



Advertising Index will be found on page 206

Joy of Sure Starting



SHOVING off toward hoped-for sport — quick pick-ups from reef to bar to reed bed — the scurry homeward at the last late minute — then it's great to know the simple fact — "My Elto will start."

It's the greatest joy among all the joys of outboard motor boating. It means contentment, serene confidence in the pleasures ahead. No "if"—no "maybe"—no "hope so." *It will start.* It will start *easily, instantly.* No winding of ropes, no spinning, no tugging. Just that easy quarter turn flip of the fly wheel. *It starts.*

Yes, we urge and impress easy starting — possibly to the neglect of equally deserved emphasis on Elto's many other points — but *it does mean so much.* It goes so very far to insure your satisfaction in your motor investment. It is so critically important to the other members of your family who will

use your motor. It is so sound a warranty of capable performance and inbuilt reliability throughout.

There are other vital facts that you will want to know about the Super Elto. Such facts as Elto's abundance of power, its speed, its lightness, its exclusive features of rudder steering, Propello Pump and many others. They are fully and interestingly covered in the new Elto catalog — gladly mailed to you on request.

But beyond all catalog descriptions, above all sales-floor claims, stands the plain, over-shadowing truth — there is no pleasure in outboard motor boating that equals *the sheer joy of sure, easy starting!*

Send today for the
New Super Elto
Catalog

ELTO OUTBOARD MOTOR CO.
Ole Evinrude, President and
General Manager
Dept. F, Mason Street, Milwaukee, Wis.

Elto

with a quarter turn

Up and Down Glen Canyon of the Colorado

(Continued from page 22)

given up and the three tired men were wading and towing dejectedly along in search of a camping place. Giving what help we could with engine and oars, we headed in for the first dry bar and tied up for the night.

A thorough overhauling in the morning brought Andy's engine back strong, but that of Bill Jones was through for good. Taking it along to have in reserve for spare parts, we rigged the two boats up in tandem and pushed them off under the power of the surviving engine. At Rock Creek, after making a second cache of all the gasoline, provisions and other impedimenta that could possibly be dispensed with, we harnessed my boat ahead of Tom's again and the flotilla proceeded as two double-headers. Keeping always within sight of one another, so that there would be a minimum of delay in giving help if needed, we ran right along until dark, making up most of the time lost the day before.

Although there were no storms in our immediate vicinity during the day, enormous banks of black clouds and the constant mutter of thunder to the northeast indicated a disturbance of great violence not far up the river. It was many days before we chanced to stumble upon the probable center of what must have been one of the most terrific tornadoes that region of fierce storms had known in some decades, but an outer splash of the primal fury that had been loosed came to us that night in the form of a three or four-foot rise of the river.

So sudden was the augmentation of the flood, and so quickly did it sweep over what we had reckoned was an absolutely bone-dry camp, that we decided later it must have come almost in the form of a wave. Andy, who was sleeping nearest the water's edge, was the only one whose bed was surrounded by the rising flood, but the legs of his cot—together with his own extremities—came in for most of the wetting. A lively five minutes sufficed to remove the boats and get the camp and cooking stuff to a higher level.

The river underwent some recession after that first flash flood, and then started upon a steady rise that was still in progress when we pushed off in the morning. The principal effect of this was acceleration of the current of perhaps a mile an hour on the average, but a good deal more than that where the river swirled along cliffs or around points. The consequence of

this was that we had to tumble over and tow at many places where we could have breasted the normal current with engine and oars.

We made good progress withal, but at a punishing cost to shoes, while they lasted, and then to feet. Before the morning was half over only the left unit of my last pair of shoes survived, which accounts for the fact that the sole of my right foot was unprotected when I landed upon the saw-toothed edge of a submerged slab of sandstone in jumping out to keep the bow from swinging at the head of a riffle.

The temperamental crater that is left after a two-inch disc of hide has been gouged down to the raw nerve-ends of the ball of the foot is not a pleasant thing to contemplate, and still less pleasant to scramble over river-bottom boulders with. The latter fact was nailed down and double-clinched in my mind during the ten busy minutes that Bill and I reeled and wrestled with the current in keeping the bow up-stream and giving the engine a fair chance to drive the boat through the crest of the riffle.

Back again in the boat, there was just time to loop a handkerchief over the throbbing seat of soreness and change the plastic left shoe to my right foot before the engine was knocked askew by contact with a boulder and we were spilled out again to anchor the swinging bow. For the next hour all three of us were in the river more than in the boats. Then a half mile of easier water brought us in sight of a deep indigo-shadowed gash in the right wall which Tom, with the pleased grin of a man uncorking a pleasant surprise, announced to be the mouth of Bridge Canyon.

"We've fetched it half a day ahead of time, boys," he chuckled. "I'm going to camp and lay over a day to rest and give you a chance to go up and see the Rainbow Bridge. Just one little rapid to pull up, and we're through till day after to-morrow. Feel good, won't it? to.....Jiminy cripes, what's that?"

The explosive ejaculation was prompted by a heavy grinding roar that assailed our ears as we pushed out beyond a jutting point of cliff which had hitherto deflected the reverberating echoes. An instant later what appeared to me a ridge of dirty white, stretching from the foam-streaked boulder fan of Bridge Creek right across the river to the opposite canyon wall, gave the answer.

(Continued on page 122)



Excellent facilities for hauling and moving boats at the big yards of Peirce & Kilburn, Inc., at Fairhaven, Mass. This yard handles boats of large size, and has complete shop equipment for machine and other types of work

MAYBACH

LIGHT WEIGHT

150 BHP.

DIESEL ENGINE

MAKES POSSIBLE

DIESEL POWERED

EXPRESS CRUISERS

FROM 68' UP

Engine Weight 2600 lbs.

MAYBACH MOTOR CO.

SUBSIDIARY ZEPPELIN AIRSHIP COMPANY

&

FR. LUERSSEN SHIP YARDS

F. W. VON MEISTER, *General Agent*

578 MADISON AVENUE

NEW YORK, N. Y.

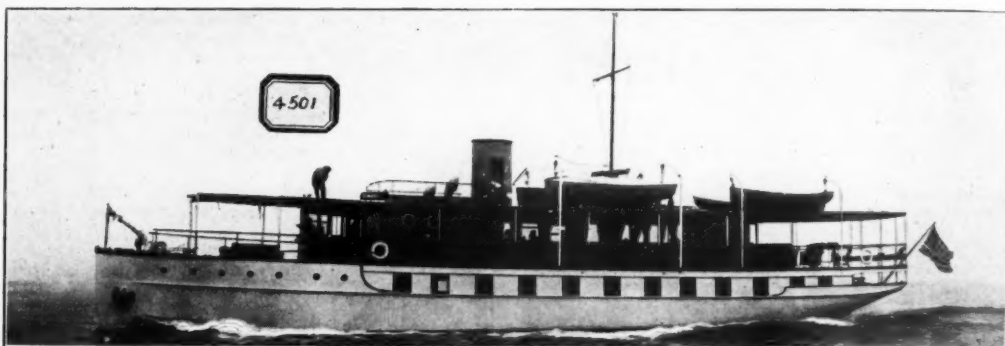
When writing please mention MOTOR BOATING, 119 West 40th Street, New York

Cable Address:
BROKERAGE, NEW YORK

COX & STEVENS

 Telephone:
VANDERBILT 8811
NAVAL ARCHITECTS—MARINE INSURANCE—YACHT BROKERS
341 Madison Avenue, cor. 44th Street, New York

On this page are shown a few representative yachts selected from our large lists. Should none appeal, kindly acquaint us with your requirements. Full information regarding costs to build, purchase or charter yachts of all types gladly furnished.

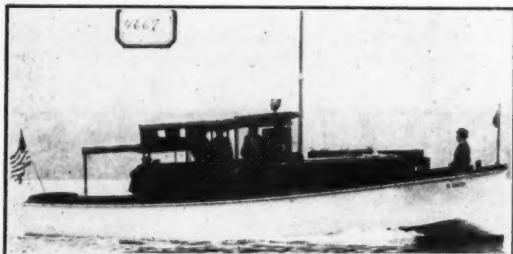


No. 4501—FOR SALE—YACHT ALSCOTIA

Especially designed and built for owner by Mathis Yacht Building Company, in 1925. Best construction. Length overall, 98 ft. 6 ins.; Beam, 19 ft.; Draft, 4 ft. 6 ins. Speed, 15 miles per hour; two 150 H.P. Winton gasoline engines. All modern conveniences, including electric light, hot water heat, Frigidaire cold storage, flush type plumbing, etc. Two power launches, two row boats. Roomy owner's quarters aft, include two double and three single staterooms; three bathrooms. Large deckhouse includes living and dining rooms, pantry, lavatory, pilot house and Captain's room.

Engine room and galley amidships. Crew's quarters forward with shower bath. Crew required eight. Furnishings and equipment complete and in excellent condition. Price attractive.

Inspectable Philadelphia, Pa. Apply Cox & Stevens, 341 Madison Avenue, New York.



No. 4667—FOR SALE—Fast, twin screw, trunk cabin cruiser built from our design 1925. Two 6 cylinder 60 horsepower Scripps motors giving speed up to 16 miles. Has large cabin containing upper and lower berths, spacious bridge and good sized cockpit. Built in best possible manner. Owner building larger boat. For further particulars and price, etc., apply Cox & Stevens, 341 Madison Avenue, New York.



No. 4642—FOR SALE—Fast, twin-screw deckhouse cruiser; 70 ft. overall, 12 ft. 6 in. beam, 3 ft. 6 in. draft. Built 1925. Speed up to 18 miles; two 6 cyl. 165/180 H.P. Sterling motors. Accommodations include large main saloon containing extension berth, also one upper and one lower berth; double stateroom, bath and toilet room; large galley. Attractively fitted and furnished. Owner will consider taking smaller craft in trade. Cox & Stevens, 341 Madison Ave., New York.



No. 3108—FOR SALE (might charter)—Fast, smart 120 ft. steel, twin-screw power yacht. Speed up to 18 miles; two 6 cyl., 250 H.P. Winton gasoline motors. Has two double and one single staterooms, bath and two toilets, in addition to two transoms in lobby. Main cabin, containing dining saloon forward. Handsomely finished and furnished. All conveniences. Makes striking appearance and has attracted considerable attention. Price very reasonable. Cox & Stevens, 341 Broadway, New York.

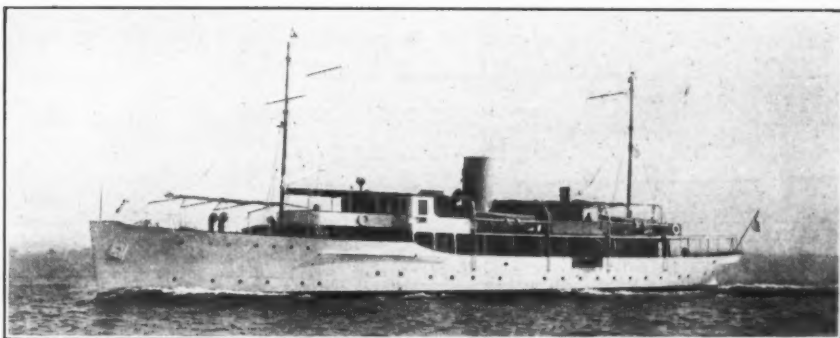
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BROKERAGE, NEW YORK

COX & STEVENS

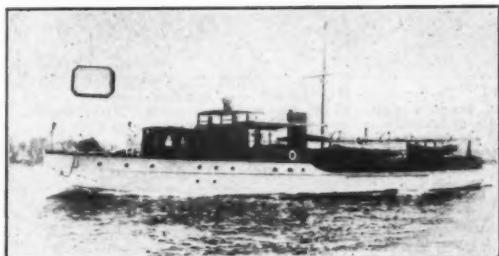
Telephone:
VANDERBILT 8811

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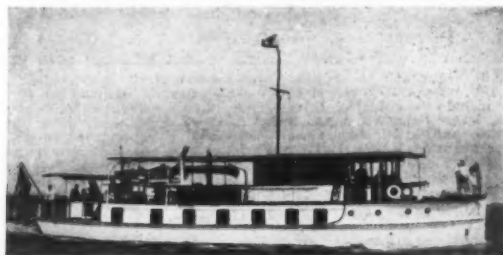
On this page are shown a few representative yachts selected from our large lists. Should none appeal, kindly acquaint us with your requirements. Full information regarding costs to build, purchase or charter yachts of all types gladly furnished.



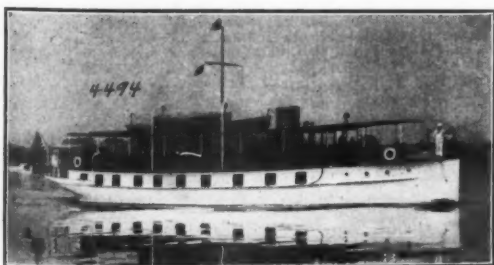
No. 4649—FOR SALE—Famous ocean going twin-screw 172 ft. Diesel yacht. Speed up to 15 miles; two 350 H.P. Wintons. Cruising radius 10,000 miles. Continuous deckhouse, containing dining saloon, library and living room. Below six staterooms, four baths. All modern conveniences. Complete equipment. Has cruised around the world and proven to be a splendid seaboat, safe and comfortable for extended offshore voyages. The most attractive proposition on the market; price extremely reasonable. Cox & Stevens, 341 Madison Ave., New York.



No. 4164—FOR SALE—Particularly able 93 ft. twin screw cruising power yacht, recent build; speed up to fourteen miles; two 6 cylinder 80 horsepower Winton motors. Accommodations include deckhouse containing dining saloon; below aft two double, one single staterooms, bathroom and two toilets. Attractively finished and furnished. Probably one of best craft of type and size available. Further particulars from Cox & Stevens, 341 Madison Avenue, New York.



No. 2600—UNUSUAL BARGAIN—Twin-screw 72-ft. Mathis houseboat; Standard motors. Accommodations consist of 3 double staterooms, dining saloon with pullman berth, bathroom and two toilets, also main saloon in deckhouse. Probably best offering craft this type available. Further particulars from Cox & Stevens, 341 Madison Avenue, New York City.



No. 4494—FOR SALE—Comparatively new 85 ft. Mathis houseboat. Speed 12-14 miles; 2 six cylinder 150 H.P. Speedway motors. Two double and two single staterooms, two baths and toilet rooms; large deckhouse containing combined living and dining room. Exceptionally well fitted and furnished; all modern conveniences. Only available as owner has built larger houseboat, similar type. Cox & Stevens, 341 Madison Ave., New York.



No. 4590—FOR SALE—Practically new 75 ft. power yacht. Speed up to 12 miles. Deckhouse containing dining saloon; two double, two single staterooms, two bath and toilet rooms. Built best manner. Attractive figure. Cox & Stevens, 341 Madison Ave., New York.

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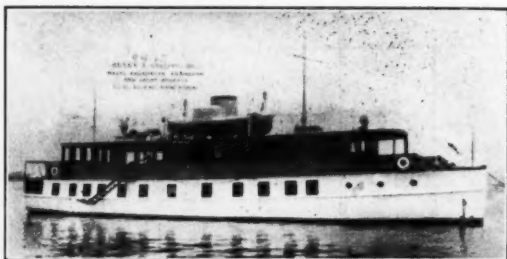
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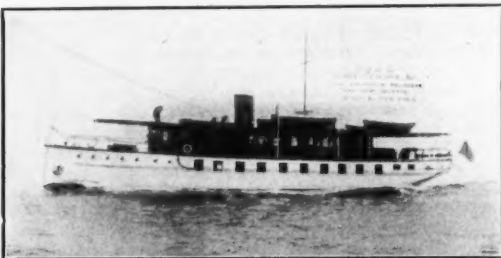
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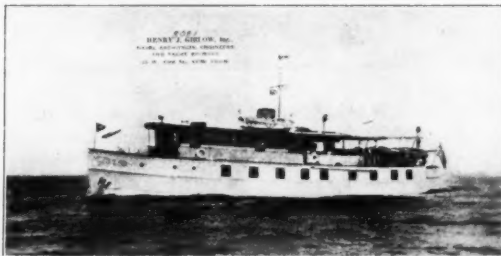
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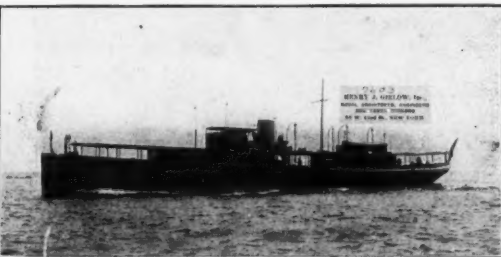
No. 9475—For Summer Charter—This attractive 85-foot twin-screw houseboat with splendid crew; two large double, two single staterooms; 3 bathrooms; deck salon 28' x 13', all teak trim. Speedway motors, speed 12-13 miles, no vibration. All modern conveniences and in excellent condition. Henry J. Gielow, Inc., 25 West 43rd Street, New York, N. Y.



No. 9426—For Sale—Modern 98' twin-screw cruising houseboat, built 1925. Speed 12-14 miles; two Winton motors. Accommodations include two double, three single staterooms, three bathrooms, large dining room and living room on deck. Beautifully furnished and fitted. An unusual offering. Price and further particulars from Henry J. Gielow, Inc., 25 West 43rd Street, New York City.



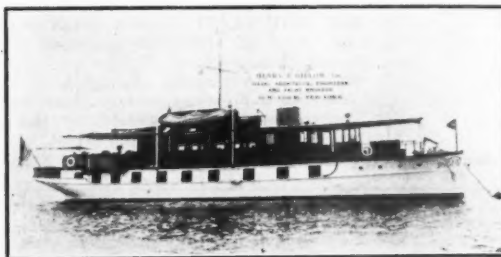
No. 8081. FOR SUMMER CHARTER—WILL SELL. Attractive twin-screw 85 ft. Houseboat with proven sea qualities; recently repainted throughout; all fine condition. Two 6-cylinder heavy duty motors. Winton electric plant, screened and heated. Launch, two rowing tenders. Large mahogany deck house contains saloon, galley, pantry. Two double, three single staterooms, three baths, large closets. Fine ventilation, large deck space. Economical, comfortable Summer home. Very complete. Henry J. Gielow, Inc., 25 West 43rd Street, New York City.



No. 7603—For Sale—Modern 145'x20'3"x7'6" twin-screw Diesel of this type for immediate purchase. There are two deck houses, forward one contains dining salon, pantry; after deck house has owner's stateroom and large living room. Accommodations below provide two double and two single staterooms, two bathrooms, extra toilet room. Winton motors. Speed, 15 miles. Excellent seaboat, suitable for extensive off-shore cruising. Henry J. Gielow, Inc., 25 West 43rd Street, New York City.



No. 9825—For Sale—Lawley 68-foot twin screw express power cruiser; speed 20-22 miles; two double staterooms; two toilet rooms; salon with two spring berths; forecabin for crew of three; excellent condition. Price and further particulars consult Henry J. Gielow, Inc., 25 West 43rd Street, New York City.



No. 9425—For Sale—Handsome 84-foot cruising houseboat; large deck house containing dining and living room. Three double, single and maid's stateroom. Three bathrooms, also crew bath; two six cylinder Speedway motors; speed, 12 miles. Furnishing and equipment in excellent condition. Price attractive. Henry J. Gielow, Inc., 25 West 43rd Street, New York.



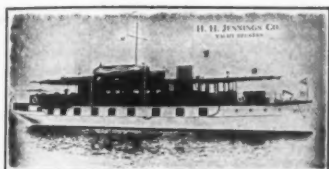
No. 9901—For Sale—Most complete and up-to-date 55-foot twin screw power cruiser; large comfortable deck house; two double staterooms; bath room and extra toilet room; Speedway motors 12-14 miles per hour. For price and further particulars consult Henry J. Gielow, Inc., 25 West 43rd, New York City.



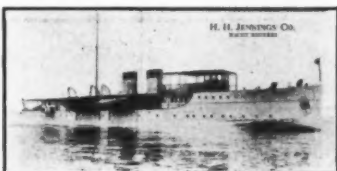
No. 8372—For Sale—Recently built Lawley 77-foot fast cruiser. Sterling motors; speed 21-23 miles. Excellent accommodations; large deck house containing dining salon and lounge; below are three double staterooms and extra toilet room; in excellent condition and completely found. Further details may be had from Henry J. Gielow, Inc., 25 West 43rd Street, New York City.

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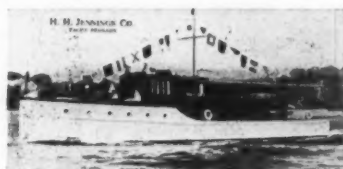
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No. 4565 — 85-foot Mathia Houseboat. Twin screw. Built 1924. Three double and two single staterooms. Large deckhouse containing dining saloon and living room. Pilothouse forward. Three bathrooms. Splendid accommodations for crew. Large galley. Two 100 H.P. Speedway motors. Speed, 12-13 miles. Electric plant. Up-to-date with all modern conveniences.



No. 4516—Twin Screw Oil Burning High Speed Steam Yacht. 225 ft. long. Steel construction. Two double and four single staterooms. Two deckhouses containing dining saloon and living room. Four toilets and two bathrooms. Speed up to 32 knots. Large cruising radius. Splendid seaboot.



No. 2733—67-ft. Twin Screw Power Yacht. New 1926. Two double staterooms. Two berths in saloon. Transom berth in deckhouse. Two toilets and bath. Beautifully finished in mahogany. Good crew's quarters. Two 100 H.P. Sterling Motors. Speed 14-15 miles. Electric plant. All modern conveniences. Splendid proposition.



No. 2604 — 62-foot twin-screw express cruiser. Built by Consolidated Shipbuilding Corporation in 1923. Two sofa berths in main saloon and one in deckhouse. Toilet. Galley. Two berths and toilet for crew. Two 300 H.P. Speedway Motors. Speed up to 30 miles. Electric plant, etc.



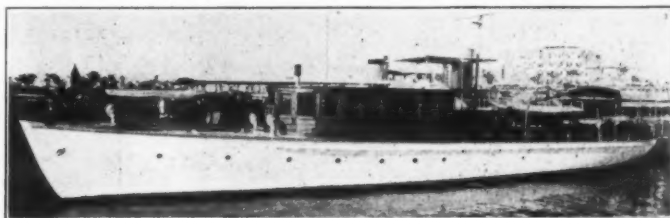
No. 2771—Twin Screw Cruiser. Built of rust-proof, stainless steel. New 1926. Practically non-sinkable and fireproof. 32'2" long, 9' beam, 2'10" draft, 6'4" headroom. Cockpit 12'x8'. Cabin has two upper and two lower berths. Toilet room and galley. Two 42 H.P. Erd motors. Speed 14 miles. Electric lights, etc. Send for full particulars. Bargain. Act quickly if interested.



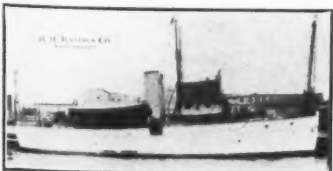
No. 2684 — 75-foot Power Yacht, practically new. Two double and two single staterooms. Dining saloon in deckhouse. Two bathrooms. Good crew's quarters. 75-100 H.P. motor. Speed 11 miles. Electric lights, etc. Strictly first-class outfit.



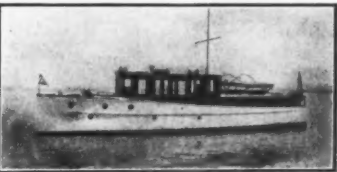
No. 4270—115-foot Oil-Burning Steam Yacht. Built by Herreshoff. Two double and one single staterooms. Two berths in main saloon. Bathroom, etc. Good crew's quarters. Steam heat. Electric Lights. All modern improvements. Speed 15-18 knots. Splendid proposition.



No. 949—Twin screw power yacht, 91'x14'9"x4'2". Heavily constructed and splendid seaboot. Large deckhouse containing combination dining and living room. Large after deck. Roomy bridge. Two double and two single staterooms. Transom berth in library. Bathroom. Good crew's quarters. Interior finish mahogany. Two 65-75 H.P. Standard Motors. Speed 12 knots. Electric lights, etc. Fully equipped including launch and dinghy. Price attractive as owner just purchased another yacht.



No. 2791—Diesel power yacht 61'6"x14'1/2"x5'. Built 1924. Strongly constructed. Frames 6"x8". Planking 2 inch Long Leaf Yellow Pine. Double stateroom. Four berths in main cabin. Pilothouse, bathroom, etc. 60 H.P. Diesel Motor. Frigidaire ice machine. Arcola hot water heater. Two generators, Delco and Universal. Speed 10 miles.



No. 2237—52-ft. Cruiser. Double stateroom. Two double berths in main cabin. Two toilets, shower bath. 50-54 H.P. Standard Motor, installed new 1925. New Delco lighting plant, new batteries, etc. Speed 10-12 miles.



No. 2242—40-ft V.-Bottom Cruiser. Double stateroom. Two transom spring berths in main cabin. Toilet room. 60 H.P. Scripps motor installed new 1924. Speed 12-13 miles. Roomy bridge deck with glass windshield. Fully equipped with cedar and mahogany tender. Electric lights, etc.

Our list comprises all the available yachts for sale and charter. The above are only a few of our offerings. Write us your requirements. Send ten cents for our illustrated catalog.

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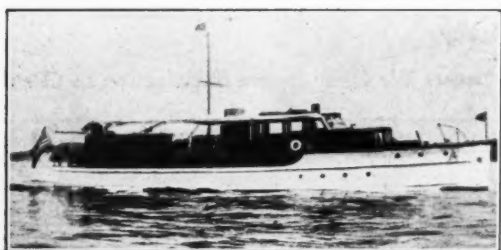


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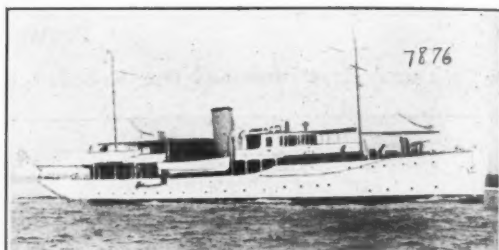
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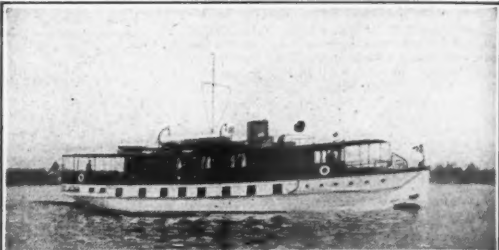
No. 8286—FOR SALE OR CHARTER—Desirable fast cruising motor yacht. 78'x13'x3'3" draft. Has two 200 H.P. Speedway motors. Three staterooms and deck dining saloon.



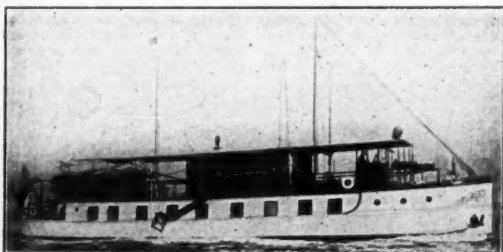
No. 7876—FOR SALE or CHARTER—Diesel off-shore yacht. Built 1922. Has two 350 H.P. Winton Diesel motors. Exceptionally good sea boat, with 10,000 mile cruising radius. Attractive owner's quarters.



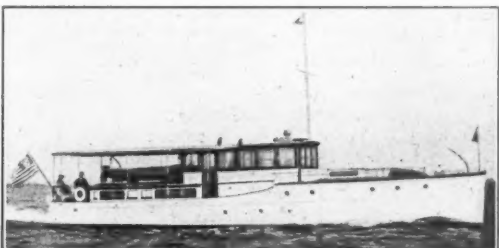
No. 1941—FOR SALE OR CHARTER—Houseboat, 100 feet x 23 feet x 4 feet. Six staterooms, four bathrooms, dining and deck sitting rooms.



No. 1999D—FOR CHARTER—Brand new 93-foot Mathis houseboat; five staterooms, three having two beds each, three bathrooms; large living and dining room on deck. Powered with two 150 H.P. Winton motors.



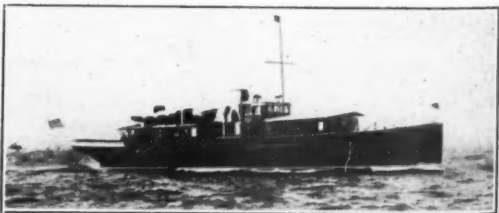
No. 1965—FOR SALE OR CHARTER—Very desirable 99-foot houseboat, three double staterooms, two single staterooms, three bathrooms, dining saloon and lounging room.



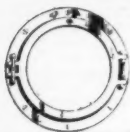
No. 8140—FOR SALE OR CHARTER—Elco 56-footer. Three staterooms, dining saloon and deck saloon. Built 1925. Two 45 H.P. Elco motors. Speed 12 miles.



No. 7634—FOR SALE—At a bargain price. Fast commuter. 61'3"x10'7"x3'3 1/2". Designed and built under our supervision in 1925. Two 300 H.P. Speedway motors. Speed up to 31 miles. In excellent condition. Owner building larger yacht.



No. 7817—FOR SALE—Price attractive. Twin-screw Diesel ocean going yacht at present cruising abroad. Due these waters about May 1st. 120'x20'x6'6" draft, built 1926. Two 175 H.P. Winton Diesel motors. Cruising speed, 13 miles. Very completely fitted and furnished.



Offer all of the desirable yachts available for sale and charter,
some of which are illustrated above.



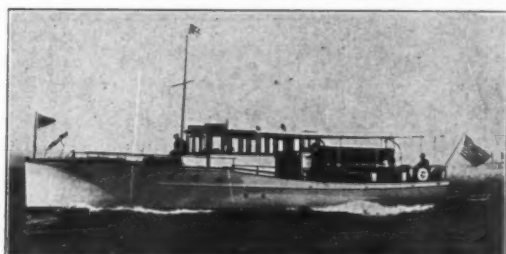
THOMAS S. HANSON**Personal Service
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Formerly General Manager of The Elco Works, of Bayonne, N. J.

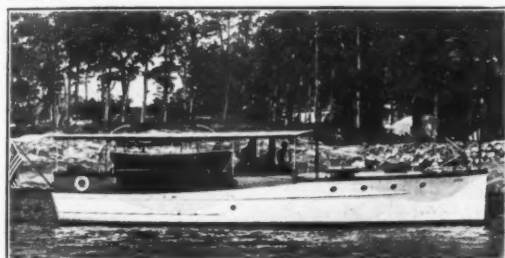
I have a carefully selected list of all sizes and types of Boats and Yachts. I will endeavor to submit to you the boats best adapted to your needs, which will give you the pleasure you have a right to expect.



No. 1—For Sale—TWIN SCREW MOTOR YACHT. New 1926. Length 68 ft. Lawley Built. Beautifully designed and constructed. Two Speedway 6-cylinder Engines. Excellent cruising speed. Has Saloon, two full width double Staterooms, Bath and Crews Quarters. Appointments very handsome.



No. 2—For Sale—ELCO TWIN SCREW DECK HOUSE CRUISER. One of these splendid boats of the latest model. Length 56 ft. Has three staterooms. Description of boat, condition and price, on request.



No. 3—For Sale—ELCO CRUISERS, 45-FOOT; ALL MODELS. These boats are noted for their success in embracing comfortable seaworthiness, with the best cruising arrangements, in a one-man boat. Description of the boats available, their condition and prices, on request.



No. 4—For Sale—FAST CABIN CRUISER. V-Bottom. Length 34 ft. Beam 9 ft. 120 H. P. STERLING-CHEVRON 6-cylinder Engine. Speed 20 miles. Has nice Cabin and Windshield. Attractive conditions and price.



No. 5—For Sale—MATTHEWS "32." One of these very desirable Cruisers in the best condition. Length 38 ft. Beam 11 ft. Fine cabin accommodations. 70 H. P. Kermath engine.



No. 6—For Sale—66-ft. MATHIS CRUISING HOUSEBOAT. This boat has all that is best in a modern Houseboat. Three large Staterooms and Bath—Deck Dining Saloon, Twin Screw Power Plant; all in beautiful condition.



No. 7—For Sale—ELCO CRUISERETTES. 34-FOOT and 33-FOOT MODELS. Selected number of these famous Cruisers which have proved so successful. Description of the boats, their condition and prices, on request.



No. 8—For Sale—RAISED DECK CRUISER. New 1926. An International 32-footer. Beam 9 ft. CONTINENTAL-VAN BLERCK 6-cylinder Engine. Has Windshield and other unusual appointments.

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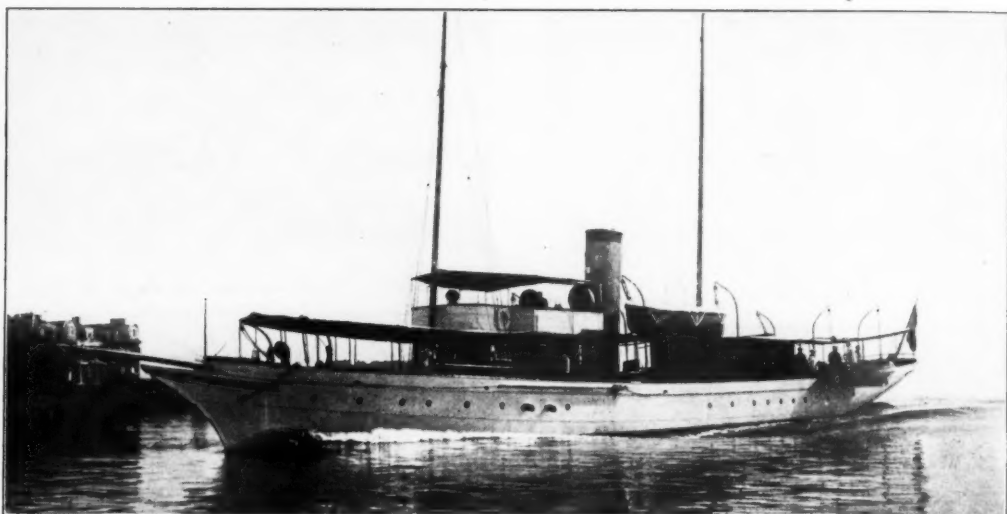
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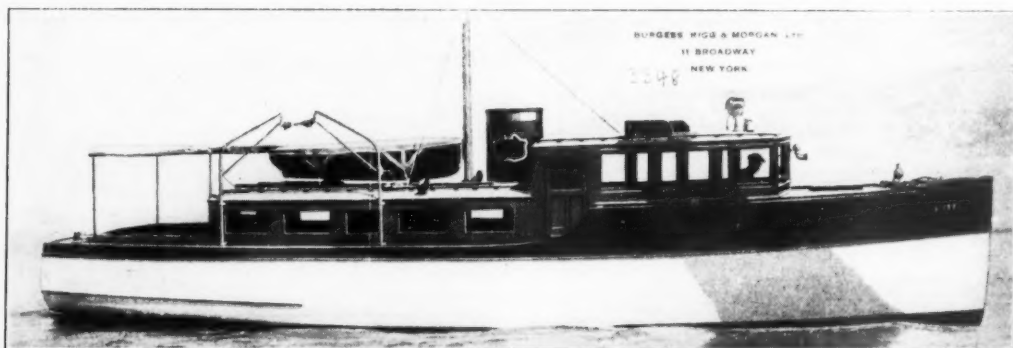
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FOR SALE—No. 5031—This beautiful old steam yacht was built by Lawley in 1902. Steel construction. Teak decks and cabins. Her accommodations include two double and two large single staterooms. She is in excellent condition throughout. Can be bought reasonably. Ideal for comfortable cruising. Particulars from BURGESS, RIGG & MORGAN, Ltd. 11 Broadway, N.Y.C.



FOR SALE—No. 3354—One of the A. C. F. 45' Cruisers. Delivered in the spring of 1926 and used only about two weeks. Completely equipped with linen, bedding, china and silver. 100 H.P. Hall-Scott motor, speed 13-15 m.p.h. Hull, motor and equipment in perfect condition. For further particulars apply to BURGESS, RIGG & MORGAN, Ltd., 11 Broadway, N. Y. C.



FOR SALE—No. 3256—Twin Screw Bridge Deck Power Cruiser. Dimensions: 72'x15'x3'10" draft. Very able and a splendid sea boat. Owing to her great beam, she has a world of room both on deck and above. Two large double staterooms. Sterling motors, giving speed up to fifteen miles an hour. Further particulars from BURGESS, RIGG & MORGAN, Ltd., 11 Broadway, New York City.



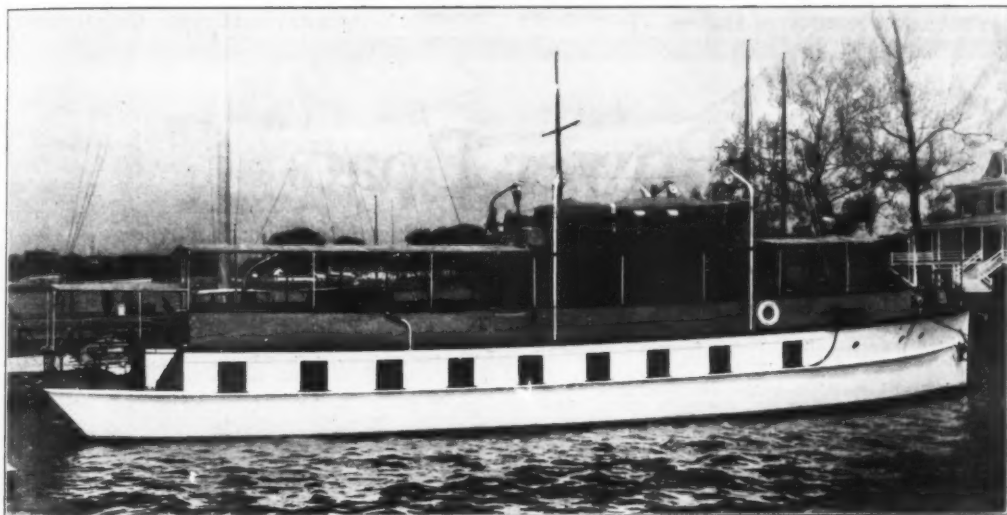
FOR SALE—No. 3353—Bridge deck cruiser 46x11x3-6. Built in 1924. Brand new 150 Peerless motor. Unusually fine layout:—large double stateroom forward with connecting toilet room; double stateroom aft with toilet and bath connecting. Also roomy main cabin. Very fine and complete equipment. For sale at bargain price. Further particulars from BURGESS, RIGG & MORGAN, Ltd., 11 Broadway, N. Y. C.

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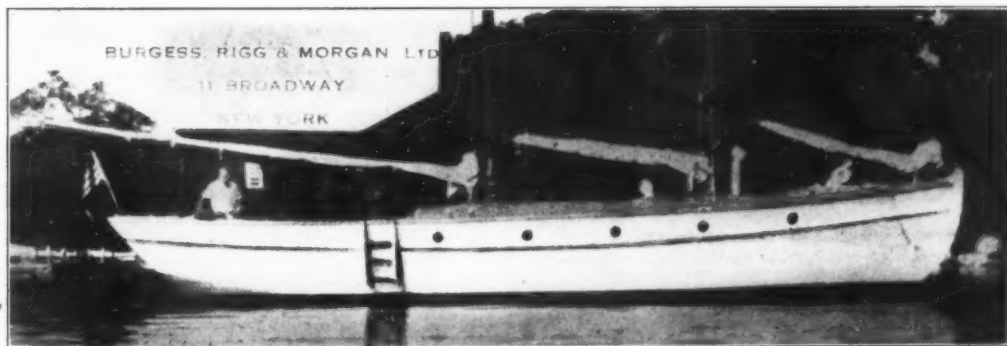
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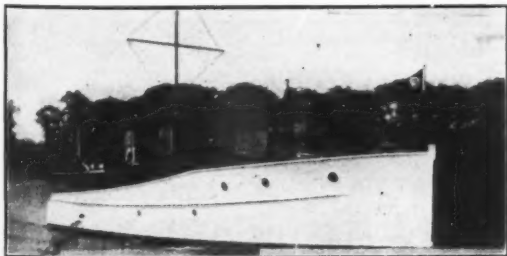
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FOR SALE OR CHARTER—No. 4030—80' Twin screw Mathis houseboat cruiser. One of the best of the later types. Two double and two single staterooms with two baths. Very fine craft in good as new condition. Has large deck and cabin space, providing maximum comfort.



FOR SALE—No. 7324—Auxiliary schooner new in 1922. Dimensions: 40' l.o.a., 31'6" l.w.l., 11'6" beam, and 5'6" draft. Has made two trips to Bermuda and proved her ability to come and go at will. Further particulars from BURGESS, RIGG & MORGAN, Ltd., 11 Broadway, N. Y. C.



FOR SALE—No. 3329—Dimensions: 52'x12'x3' draft. An ideal boat for Northern or Southern cruising. Accommodations for eight. One man control. Standard motor. Large comfortable enclosed deckhouse. All in perfect condition. Full inventory. Ready to use. Apply to BURGESS, RIGG & MORGAN, Ltd., 11 Broadway, New York City.



FOR SALE—No. 3350—Bridge deck power cruiser designed by Alden, built in 1922. Double stateroom, 2 berths in cabin. Model FM Sterling motor, 110 H.P. In good condition, having been over-hauled in 1926. The boat is in A1 shape and looks like new. Full mahogany trim. Very large, comfortable cockpit with seating capacity for eight to ten people. Further particulars from BURGESS, RIGGS & MORGAN, Ltd., 11 Broadway, New York City.

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Power Boats

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- No. 743—39-footer double cabin Lawley, built in 1918, 60 h.p. Buffalo, 1922; fast. \$2,500.
- No. 783—39-footer—built 1922—sleep 4—unusual equipment, large cockpit, 4 cyl. Palmer. \$3,500.
- No. 839—41-foot cruiser—double stateroom, main saloon. Electric lights. New 1926, Bridgeport engine. \$4,000.
- No. 932—42-footer, Bridge deck, saloon forward, two double staterooms aft, Lathrop 1925—exceptional. \$7,000.
- No. 1206—42-footer, two staterooms, toilet, large galley, splendid sea boat, 70 h.p. Stearns 14 m.p.h. \$4,000.
- No. 224—Exceptionally well built 44-footer, double cabin, excellent accommodation, Buffalo engine. \$7,500.
- No. 1198—45-footer 1925, 75 h.p., "Big Chief Special" Red Wing, four owner's berths, 2 crew. \$6,000.
- No. 1183—45-footer, Deck Saloon, single and double staterooms, 2 berths forward, 2 toilets. Built 1926, two 45 h.p. Stearns, lighting plant. \$12,000.
- No. 254—46-footer, two double staterooms, two toilets and bathtubs, 1926 Peerless engine. \$12,000.
- No. 1178—44-footer, Twin screw, Lawley built 1924, double stateroom, 2 berths in saloon, Scripps motors. Suitable for racing tender. \$12,000.
- No. 922—46-foot Commuter—built 1923—double planked mahogany, finest possible construction, 200 h.p. motor, forward cockpit. \$20,000.
- No. 833—46-foot Mower design—built 1925, double cabin, 235 h.p. Sterling Dolphin, 20 m.p.h. \$15,000.
- No. 1191—49-foot Consolidated Cruiser—sleeps 8 in owner's party, 2 crew, 75 h.p. Sterling. \$5,000.
- No. 1133—A heavily built 50 footer, double stateroom—four berths in saloon, crew's quarters, Standard engine. \$12,000.
- No. 984—52-footer, built in 1925, two double staterooms, bath and toilet—2 Kermath engines. \$17,500.
- No. 456—54-foot cruiser, double and single staterooms—three toilets, shower, four berths in saloon. 14 m.p.h. \$11,500.
- No. 958—Two Elco 54's and three Elco 56's—Cruisers, built 1922 to 1925 from \$10,000 to \$22,000.
- No. 152—57-foot Mathis built, double stateroom aft, three berths in forward saloon—two 1925 Red Wing motors. \$15,000.
- No. 915—58-foot Express Cruiser—beautiful Luders job—two 150 h.p. motors, two staterooms, two toilets, 20 m.p.h. \$20,000.
- No. 1054—65-footer, two double staterooms, bath, saloon, forecabin, two 300 h.p. Sterling Coast Guards installed fall of 1926—25 m.p.h. \$30,000.
- No. 416—65-foot Matthews Cruiser, large deckhouse—two double staterooms, saloon, bath, two Sterling Dolphins. \$25,000.
- No. 1082—68-footer, now building, double and two single staterooms, bath, 3 toilets, deck house, two Sterling Chevrons, 15 m.p.h. Price on request.
- No. 724—77-foot Lawley job—three double staterooms, large deck house, two Sterling, 20 m.p.h., remarkably well laid out. \$35,000.
- No. 1108—78-footer, built 1926, two large double staterooms, bath, dining saloon, deck house. Make offer.
- No. 246—81-foot Lawley built, exceptional accommodation—bath, steam heat, Standard engine, any reasonable offer considered.
- No. 1204—82-footer, Mathis built—two double staterooms, roomy deck saloon, ample deck space—100 h.p. Mianus Diesel, very reasonable.
- No. 1095—90-footer, completely overhauled and refurnished in 1926, unusual deck space—two Wintons giving speed of 12 m.p.h. Make offer.
- No. 249—92-footer, exceptionally fine, single and two double staterooms, main and dining saloons—two Winton engines. \$45,000.
- No. 1141—22-footer, built 1926, never used. Completely equipped for cruising. Gray engine. \$2,500.
- No. 1076—25-footer, two berths and toilet. Electric lights. Fresbie engine. \$950.
- No. 1167—25-footer, two berths, galley toilet, sink, ice-box, 4-cyl. Scripps Special. \$850.
- No. 1099—Three Elco's, 26 footers, 1925 in excellent condition. Prices from \$1,400 to \$1,800.
- No. 1216—30-footer, two berths, toilet, galley, ice-box, complete cruising equipment, 4-cyl. Peerless. \$1,500.
- No. 759—30-footer, built 1925. Never used. Sea Skiff type, exceptionally well built. 100 h.p. Kermath. \$4,500.
- No. 1205—30-footer Elco. Express day cruiser—built 1924, cabin with toilet, large cockpit, 20 m.p.h. \$1,500.
- No. 678—Four Elco Cruisettes, built 1924-1926, all in good condition. \$3,400 to \$5,000.
- No. 1222—32-foot speed boat, 45 to 50 m.p.h., never used—best construction—2-275 H.P. Sp. Packards. \$6,500.
- No. 1195—32-footer—Fast Hand Championship Cruiser—4 berths, toilet, galley, electric lights, 100 h.p. Sterling. \$5,000.
- No. 1171—32-footer—International, built 1926, little used—4 berths, toilet, exceptional equipment. \$4,300.
- No. 1159—34-footer. Fast Play Boat—built by Peterson, 1925, best workmanship. 180 h.p. Speedway, 22 m.p.h. \$7,000.
- No. 1144—34-footer, fast day cruiser, handsome captain's gig, U.S.N., beautiful job, 140 h.p. Stearns. \$4,000.
- No. 907—35-footer, built 1925, little used, double stateroom, 4 other berths, exceptional equipment, Red Wing motor. \$4,500.
- No. 1007—A beautiful 36-foot Luders double cabin Cruiser—Sterling engine. \$4,000.
- No. 898—37-foot express cruiser. Built 1925—double cabin, forward cockpit. Speed up to 30 m.p.h. \$7,500.

Full descriptions, photos and layouts of any of our listings sent on request

CHARLES D. MOWER

FREDERIC P. HUMPHREYS

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Naval Architects and Yacht Brokers

NEW YORK

347 MADISON AVENUE at 45 Street

MURRAY HILL 2320; Cable MOWERCD

Power Boats

The following are suggestive as representative of this type in our files

Fast Runabout

26 foot teak runabout, built by Consolidated. Suitable for yacht tender or day cruising; also well adapted for inland waters. Delivered in commission. Choice of new motor, either 6 cyl. Gray or "Super-four" Universal, giving speed of approximately 18 miles per hour; or will sell hull complete ready for engine at a sacrifice figure.

New Sea Sled

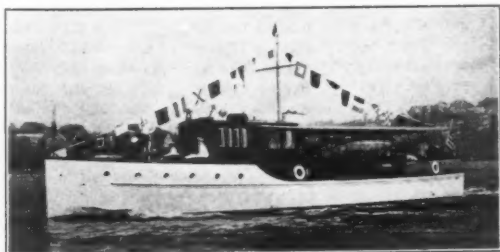
Sea Sled Model 23. Delivered 1927, never used as owner has purchased larger cruiser. Double planked mahogany hull, copper fastened. Finest construction; Excellent Sea Boat. Powered with 6 cyl. 75 h.p. motor. For sale at substantial reduction from list price.



New Stock Boats

For those who can not find a suitable used boat to meet their requirements, we can submit complete details and specifications of all the standard makes of new stock cruisers and runabouts.

We offer these boats at manufacturers' price and suggest our services in aiding you in the selection of a boat best adapted to your needs.

*Full descriptions, photos and layouts of any of our listings sent on request*

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Phone: PENnypacker 4830

 Dodge Watercars — Cape Cod Sail Boats
 Baby Buzz Outboard Motor Boats

BOATS FOR SALE AND CHARTER

RAISED DECK AND BRIDGE DECK CRUISERS

26'10" x 8' x 3'3"	Raised Deck
28' x 7'6" x 2'6"	Raised Deck
28' x 9' x 3'	Raised Deck
28'10" x 8'6" x 3'	Raised Deck
28' x 7'2" x 2'6"	Raised Deck
31'4" x 8'6" x 2'6"	Raised Deck
31' x 8'6" x 3'	Bridge Deck
31'10" x 9'8" x 3'	Raised Deck
32'4" x 8'10" x 3'	Raised Deck
33' x 8' x 2'6"	Raised Deck
34' x 8'6" x 2'9"	Con. Play Boat
35' x 8'6" x 3'	Raised Deck
35' x 8' x 2'8"	Raised Deck
35'2" x 9' x 3'	Raised Deck
35' x 9'4" x 3'	Raised Deck
36'6" x 9' x 3'	Raised Deck
36' x 8'6" x 2'6"	Raised Deck
36' x 9' x 3'	Raised Deck
36'7" x 10' x 3'6"	Raised Deck
38' x 9'6" x 3'	Raised Deck
38' x 9' x 3'	Raised Deck
38' x 7'10" x 3'	Bridge Deck
40' x 11' x 36"	Enc. Bridge Deck
40' x 9' x 3'6"	Raised Deck (2)
40' x 9'6" x 2'6"	Rochester B.D.
40' x 10' x 2'6"	Bridge Deck
40' x 10' x 3'	Raised Deck
40' x 10' x 2'10"	Bridge Deck
41'6" x 10' x 3'3"	Bridge Deck
41'5" x 9'10" x 3'	Elco Cruiser
43' x 9' x 3'6"	Bridge Deck
43'x11'x2'9"	Bridge Deck
44' x 11' x 3'6"	Bridge Deck
45' x 10'6" x 3'4"	Elco Cruiser
49'11" x 11' x 3'	Bridge Deck
50' x 12' x 3'6"	Bridge Deck
50' x 11'6" x 3'	Bridge Deck (2)
51' x 10'3" x 4'3"	Bridge Deck
52' x 11'7" x 40"	Con. Bridge Deck
53' x 10'6" x 4'	Bridge Deck
54' x 11'2" x 3'2"	Bridge Deck
54' x 13' x 3'	Elco B.D. (2)
60'5" x 12'7" x 3'6"	Bridge Deck (2)
60'3" x 11'6" x 3'9"	Bridge Deck
61' x 13'6" x 5'	Matthews B.D.
63' x 12'9" x 3'6"	Bridge Deck
65' x 13'2" x 3'6"	Bridge Deck
65' x 13' x 4'	Bridge Deck
68' x 15'4" x 4'	Bridge Deck (2)
71'8" x 15' x 4'	Bridge Deck (2)
80' x 11'10" x 4'8"	Herreshoff B.D. (2)
82' x 14'6" x 3'	Bridge Deck (2)
83'9" x 14' x 4'	Bridge Deck (2)

24 H.P. Redwing
25 H.P. Kermath
12 H.P. Relaca
15 H.P. Scripps
20 H.P. Continental
25 H.P. Locomobile
25 H.P. Keystone
24 H.P. Palmer
40 H.P. Wisconsin
40 H.P. Fay & Bowen
290 H.P. Hall Scott
14 H.P. Harris
40 H.P. Gray
30 H.P. Peerless
50 H.P. Fay & Bowen
25 H.P. Sterling
24 H.P. Redwing
40 H.P. Sterling
40 H.P. Fay & Bowen
30 H.P. Lathrop
40 H.P. Doman
60 H.P. Buffalo
42 H.P. Friable
20 H.P. Kermaths
150 H.P. Speedway
70 H.P. Kermath
60 H.P. Buffalo
60 H.P. Scripps
43 H.P. Lathrop
42 H.P. Elco Marine
150 H.P. Speedway
80 H.P. Buffalo
70 H.P. Hall Scott
42 H.P. W.S.M.
150 H.P. Speedway
37 H.P. Standard
70 H.P. Maybach
150 H.P. Speedway
150 H.P. Speedway
40 H.P. Lathrop
50 H.P. 20th Century
42 H.P. Elco Marines
150 H.P. Speedways
60 H.P. Scripps
85 H.P. Winton
50 H.P. Hettinger
150 H.P. Speedway
90 H.P. Sterling
65 H.P. Mianus
94 H.P. Sterling
180 H.P. Speedway
115 H.P. Speedway
75 H.P. 20th Century

AUXILIARIES

27' x 9' x 4'2"	Aux. Ketch	7 H.P. Brown
28'x9'10"x5'	Aux. Yawl	10 H.P. Palmer
29' x 9' x 1'6"	Aux. Sloop	6 H.P. Liberty
30'x9'x2'	Aux. Cat Boat	4 H.P. Palmer
31' x 10'9" x 3'2"	Aux. Ketch	15 H.P. Doman
32' x 11' x 5'	Aux. Ketch	20 H.P. Roberts
32'8" x 12' x 4'6"	Aux. Yawl	16 H.P. Engine
36' x 7'6" x 5'5"	Sloop	(no engine)
36' x 12' x 2'8"	Aux. Ketch	12 H.P. Peerless
37'10" x 11'4" x 3'6"	Aux. Sloop	5 H.P. Evinrude
37' x 12' x 2'9"	Sloop	(no engine)
38' x 10' x 3'6"	Aux. Sloop	16 H.P. Standard
40' x 10' x 3'	Bugeye Schooner	7 H.P. Regal
40' x 9'3" x 6'3"	Aux. Sloop	24 H.P. Cadyford
40' x 12'6" x 4'	Aux. Yawl	15 H.P. Scripps
42' x 12' x 4'	Aux. Schooner	15 H.P. Friable
43' x 12' x 4'	Aux. Yawl	35 H.P. Peerless
45' x 14' x 4'	Aux. Schooner	10 H.P. Palmer
45' x 13'4" x 4'6"	Aux. Schooner	14 H.P. Hill Diesel
45' x 15' x 3'10"	Aux. Sloop	30 H.P. Vulcan
48'8" x 12'11" x 4'9"	Aux. Schooner	50 H.P. Gaeth
49' x 12'4" x 6'2"	Aux. Yawl	7 H.P. Palmer
51' x 14'3" x 5'6"	Aux. Schooner	25 H.P. Scripps
52'3" x 12' x 7'4"	Aux. Schooner	40 H.P. Scripps
54' x 15' x 8'9"	Aux. Schooner	20 H.P. Van Blerck
58' x 15' x 4'10"	Aux. Ketch	60 H.P. Holmes
63' x 15'6" x 4'	Aux. Ketch	40 H.P. Scripps
72' x 14'6" x 9'9"	Aux. Schooner	25 H.P. Scripps
77' x 17'6" x 6'	Aux. Schooner	65 H.P. Standard
50' x 14' x 3'3"	Aux. Schooner	40 H.P. Stearns

EXPRESS CRUISERS

36' x 9' x 3'	Express Cruiser	150 H.P. Van Blerck
37'6" x 9'6" x 30"	Express Cruiser	300 H.P. Fiat
42'10" x 10' x 2'9"	Express Cruiser (2)	200 H.P. Hall Scott
45' x 11'6" x 42"	Express Cruiser (2)	300 H.P. Sterling
45'6" x 9'9" x 3'	Express Cruiser	450 H.P. Johnson Globe
50'8" x 10'9" x 3'	Express Cruiser (2)	450 H.P. Liberty
50'6" x 8'6" x 3'2"	Express Cruiser	185 H.P. Van Blerck
58' x 12' x 3'6"	Express Cruiser	140 H.P. Stearns
62'4" x 11'3" x 3'	Express Cruiser (2)	225 H.P. Sterling
66' x 11'4" x 3'2"	Herreshoff Exp. C. (2)	290 H.P. Sterling
66' x 11'6" x 3'	Herreshoff Exp. C. (2)	200 H.P. Van Blerck

HOUSE BOATS

45' x 13'5" x 3'	Mathis H.B. (deck house)	45 H.P. Scripps
45' x 13'5" x 3'	Mathis H.B.	60 H.P. Standard
50' x 14'6" x 3'3"	House Boat	126 H.P. Sterling
50' x 14'3" x 3'	House Boat	97 H.P. Sterling
63' x 16' x 3'	House Boat (2)	50 H.P. 20th Century
70' x 17' x 3'	House Boat	35 H.P. Palmer
71'6" x 16'5" x 3'8"	House Boat	90 H.P. Standard
80' x 18' x 3'6"	House Boat (2)	65 H.P. Lathrops

SALES and CHARTERS

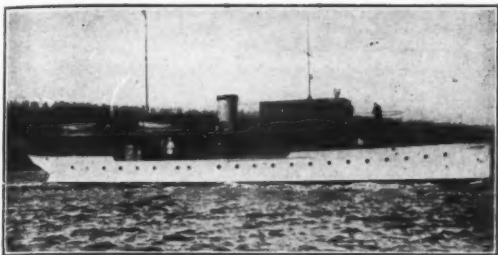
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WHITEHALL 1170

NAVAL ARCHITECTURE

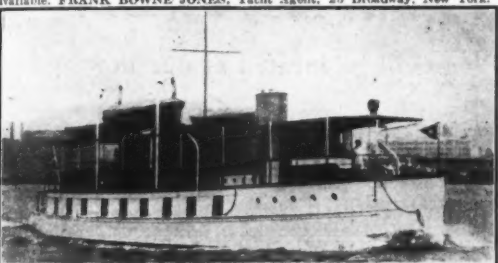
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MARINE INSURANCE

APPRAISALS



No. 7768—FOR SALE—120' Light Draft Steel Cruiser. Best design and build. Twin-screw. Splendid accommodations. Best yacht of its size and type available. FRANK BOWNE JONES, Yacht Agent, 25 Broadway, New York.



No. 1247—FOR SALE OR CHARTER—80' Twin-Screw Power House Yacht—built by Mathis—Winton motors. One single and three double staterooms. Dining saloon on deck. Attractive price. FRANK BOWNE JONES, Yacht Agent, 25 Broadway, New York.

Other Yachts Specially Offered
This Month

No. 4771—SEAGOING DIESEL YACHT—Length, 150 ft. (about)—Twin Screw—Steel Hull—One of the best of the large modern yachts of this type and the only one that can be bought at a reasonable price.

No. 7463—TWIN-SCREW POWER YACHT—Length, 100 ft. (about)—Steel Hull—Built by Lawley—Has the accommodations and comfort of a houseboat—Considered one of the best vessels of her size and type.

No. 1800—TWIN-SCREW EXPRESS YACHT—Length, 80 ft. (about)—Built by the Herreshoffs—Speed up to 20 miles—Especially adapted for commuting service and day cruising—Good as new.

No. 5885—AUXILIARY CRUISER—Length, 70 ft. (about)—Twin-Screw—Excellent design and build—Two double staterooms—Saloon, bath, etc. Attractive price.

No. 8055—POWER HOUSE YACHT—Length, 100 ft. (about)—One of the latest boats of Mathis build—Really better than new—Offered for sale for personal reasons—Might be chartered for the summer.

No. 7372—AUXILIARY SCHOONER—Length, 90 ft. (about)—Fine cruising yacht—Built to Lloyds—Excellent condition—Low price—Might be chartered.

Full particulars of the above vessels will be furnished by
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25 Broadway, New York

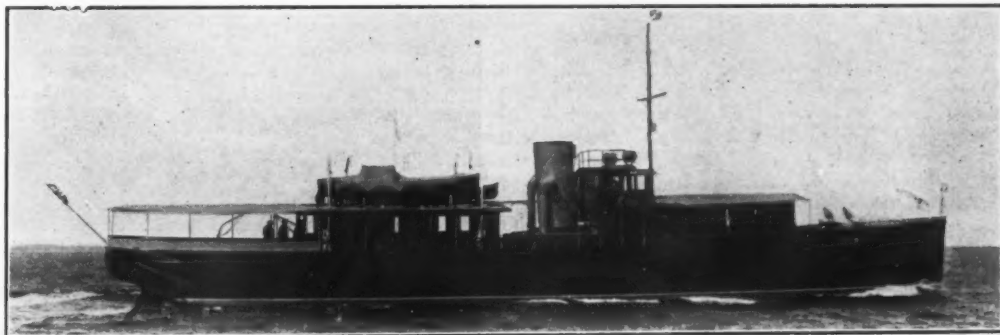
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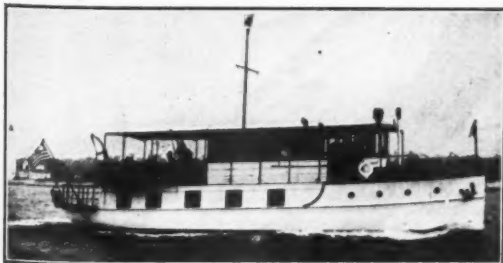
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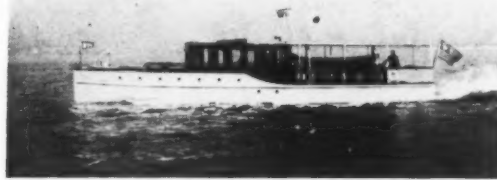


DIESEL YACHTS

Several motor yachts of this type now available for sale and charter. Plans and full details gladly furnished.



No. 200—Mathis Power Houseboat, located Florida, 52 ft., 4 cyl. Standard motor, first class shape, full cruising outfit.



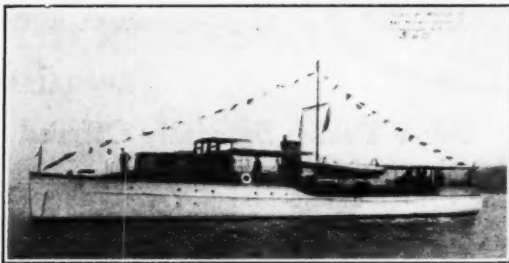
No. 2199—Enclosed bridge deck cruiser, 58 x 12, new Stearns 6 cylinder motor installed, three staterooms, etc.

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

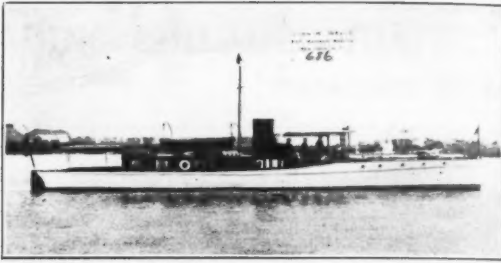
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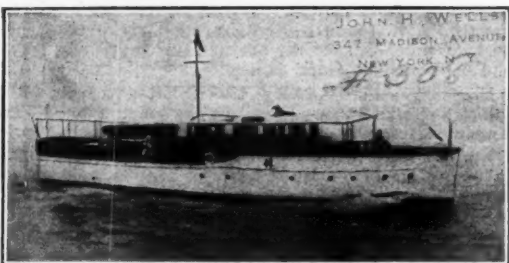
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 347 MADISON AVENUE, NEW YORK CITY

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No. 365—FOR SALE—Cruising power yacht, 93 ft. by 15 ft. by 4 ft. 6 in. Powered with two 6-cylinder Wintons, 80 h.p. each. Installed 1921. In perfect condition. Speed 12-14 miles per hour. Owner's accommodations two double and one single staterooms, 1 bath, 2 toilets. Lounging room below deck, dining saloon and galley in deckhouse. Everything about boat in perfect condition. Further particulars—John H. Wells, Inc., 347 Madison Avenue, New York City.



FOR SALE—No. 686—Twin screw express cruiser, 77 ft. overall. Consolidated built. Powered with two 6 cyl. Speedway motors. Two double staterooms, toilet and cabin. Large Bridge deck and after cockpit. Completely equipped and furnished like new. Positively in the finest condition possible. For price and further particulars—John H. Wells, Inc., 347 Madison Ave., New York.

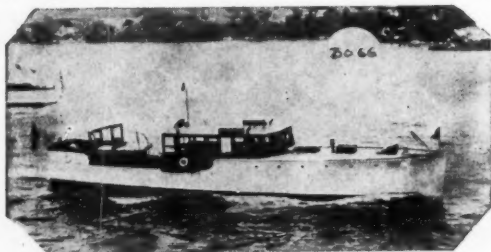


No. 465—FOR SALE—Attractive, modern twin screw cruiser built 1924. 65 ft. overall, 14 ft. beam, 3 ft. 10 in. draft. Powered with two 6 cyl. Sterling Motors. Speed 13-14 m.p.h. Two double staterooms. Deckhouse. Dining Saloon forward; one bath, two toilets. Completely equipped with all modern conveniences. For price and further particulars apply John H. Wells, Inc., 347 Madison Ave., New York City.

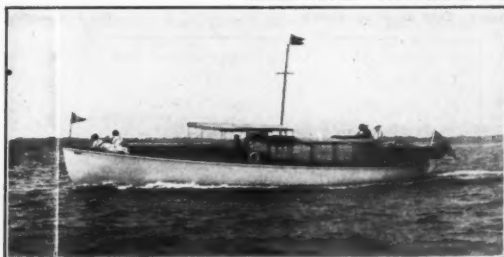
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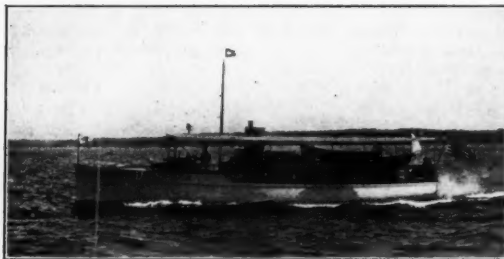
R. M. HADDOCK
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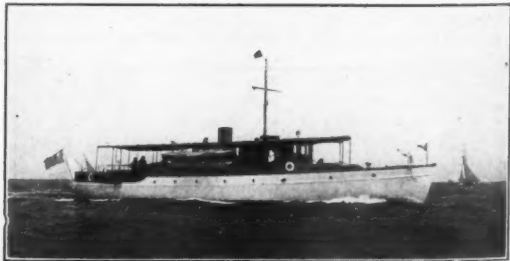
No. 3066—For Sale—Twin-screw motor yacht, 76'x14'x3'9" draft. Two six-cylinder Speedway motors, new 1925. One of the most desirable boats of her type now available. Sleeps six comfortably. New York inspection. For further particulars consult R. M. HADDOCK, 50 East 42nd Street, New York City.



No. 415—For Sale—Herreshoff day cruiser 50 x 11 x 2' 9" draft. Four cylinder, Standard motor, speed up to 12 miles per hour. Large roomy cockpit and small cabin forward, containing two transom berths, toilet and galley. Fine sea boat and can be purchased at a very attractive figure. For further particulars regarding price, etc., consult R. M. HADDOCK, Naval Architect and Yacht Broker, 50 East 42nd Street, New York City.



No. 479—For Sale—50' bridge deck cruiser designed and built by Laiders. Accommodations consist of a double stateroom and saloon which is fitted with Pullman berths. Speed up to 14 m.p.h. Is in excellent condition. For further particulars, consult R. M. HADDOCK, Naval Architect and Yacht Broker, 50 East 42nd Street, New York City.



No. 3028—For Sale—Twin screw motor yacht, 83 x 14 x 5' draft. Two Heavy duty Murray Tregutha motors in perfect condition. Accommodations consist of two double and one single stateroom and two complete bath rooms; dining saloon in deck house. This yacht has cruised to Labrador and is ideal for Coast wise or ocean sailing. Construction extremely heavy. For further particulars regarding price, etc., consult R. M. HADDOCK, Naval Architect and Yacht Broker, 50 East 42nd Street, New York City.

HARRY W. SANFORD

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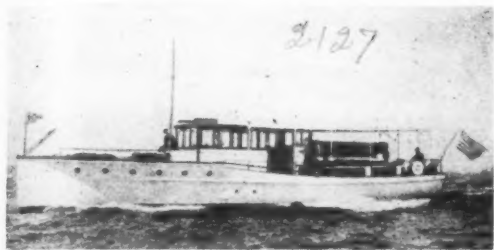
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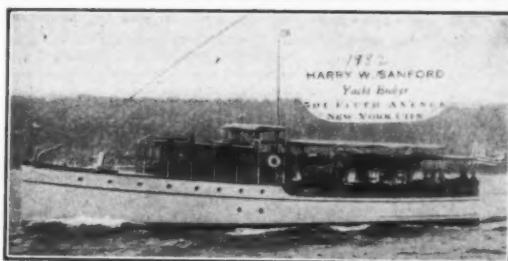
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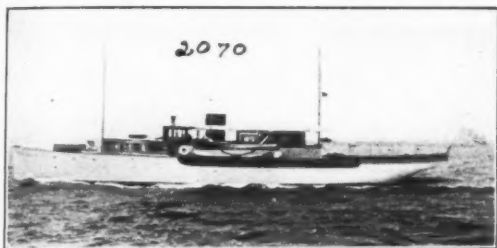
OUR MOTTO: To offer yachts which will be a pleasure for you to own and a recommendation for us to sell; to render such service as to have you feel you should like to do business with us again.



No. 2127—FOR SALE—54' Twin-Screw Elco Cruiser. Speed 12-14 miles. 1 double stateroom and saloon. Enclosed deck house. Has had excellent care and offered at a most attractive price.



No. 1982—FOR SALE—Very desirable and seaworthy 75' cruiser, built in 1925. Has 4 staterooms, 2 baths, large deck house, dining saloon, etc. High-class in every particular. Speed 12 miles.



No. 2070—FOR SALE—102' twin-screw Diesel powered yacht, speed 12 miles. 4 staterooms, deck dining room. Bath and shower room. Built in 1925. In the best of condition and beautifully furnished.



No. 2135—FOR SALE—98' twin-screw cruising house-boat, speed 15 miles. Built in 1925. Has 5 staterooms, bathroom, showers, deck dining saloon, etc. An unusually spacious and fine craft.

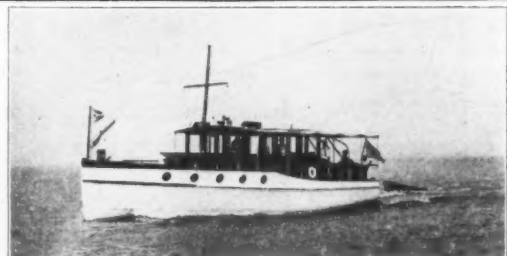
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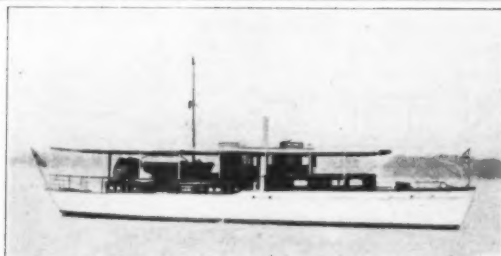
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Wrigley Building: 400 NORTH AMERICAN AVE., CHICAGO, Telephone Superior 0806

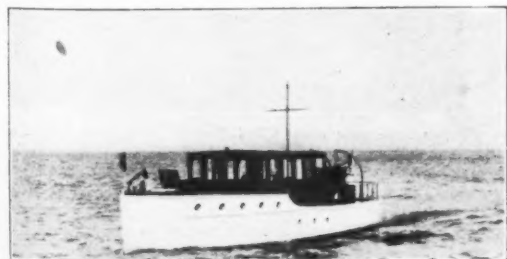
WE HAVE A COMPLETE LIST OF ALL STEAM AND POWER YACHTS, AUXILIARIES AND HOUSEBOATS, WHICH ARE FOR SALE AND CHARTER. Plans, photographs and full particulars furnished on request.



No. 1138. For Sale—50 ft. x 14 ft. beam deckhouse cruiser with Diesel engine. Heavily constructed, recent build. Excellent value. Further particulars from Henry C. Grebe & Co., Inc., 400 N. Michigan Avenue, Chicago, Ill.



No. 52—Unusual bargain. 66 ft. x 13 foot beam seaworthy cruiser. Completely reconditioned. Almost new six cylinder Standard engine. Owner building larger yacht. Price reasonable for quick sale. Henry C. Grebe & Co., Inc., 400 N. Michigan Ave., Chicago.



No. 1135—52'6" x 12'6" x 3'4" twin screw deckhouse cruiser. Built 1925. One double stateroom with shower bath, 4 berths in dining saloon, 2 toilets. Scripps motors. Delco light plant, water pressure system and ice plant. Complete details from Henry C. Grebe & Co., Inc., 400 North Michigan Ave., Chicago, Illinois



No. 1018—Here is your opportunity to purchase one of the Great Lakes 54-foot twin-screw express cruisers at about one-third the original cost. Sleeps 8 in owner's quarters and two in crew, but has one-man control. Speed up to 22 miles. Very complete. Further particulars from Henry C. Grebe & Co., Inc., 400 North Michigan Ave., Chicago, Ill.

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

Naval Architects
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Designers of Power and Sail Yachts, with an exceptional knowledge of Yacht Engineering and Practical Construction, in both wood and steel, which gives added value to our services and a result not always attainable.

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ELDREDGE-McINNIS, Inc.

100 STATE STREET

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{ Formerly General Managers and Chief Naval Architects }

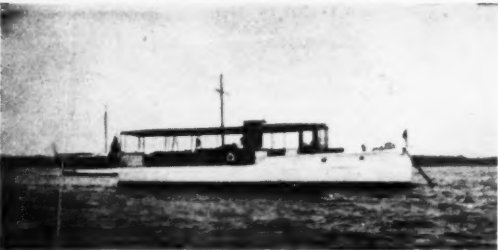
{ for George Lawley & Son Corporation, Neponset, Mass. }

WALTER J. McINNIS

We are thoroughly familiar with the yachts listed in this advertisement For Sale and recommend them.



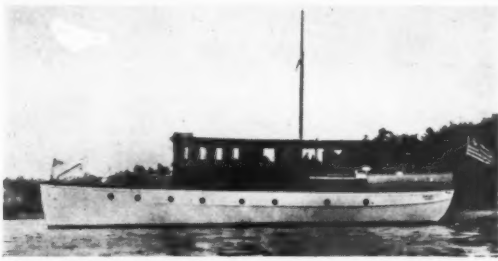
FOR SALE—Lawley-built fast express cruiser. New 1923. Speed on trial trip 33 miles. 77' overall, 12'6" beam, 4'6" draft. Two 300 H.P. Sterling Viking engines in A-1 shape. Double planked. Outside joiner work in mahogany, inside mahogany and white. Saloon and smoking room on deck. Below deck in owner's quarters 3 large double staterooms, 2 toilet and bath. One of the very few fast and seaworthy yachts available. Equipment most complete. Apply Eldredge-McInnis, Inc.



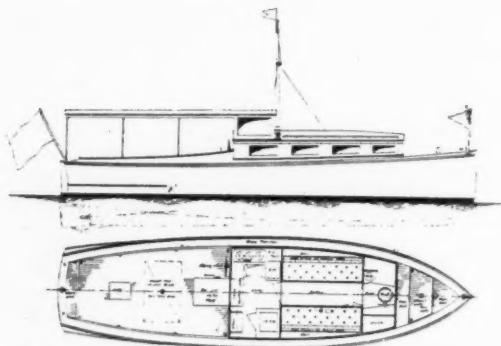
FOR SALE—Consolidated Ship Building Co.'s bridge deck cruiser 53' overall, 51'9" waterline, 11'3" beam, 3' draft. Built in 1915. Boat is in first class shape in every detail. Finish perfect inside and out. New electric generating plant and batteries 1926. Speedway engine entirely re-built 1926. Equipment complete. Apply Eldredge-McInnis, Inc.



FOR SALE—Raised deck cruiser. 44'6" overall, 9'6" beam, 3' draft. Built in 1921. Sterling engine in good condition. Boat in A-1 shape, looks like new. Cabin equipment complete. Apply Eldredge-McInnis, Inc.



FOR SALE—Power cruiser, 55' overall, 47' waterline, 11'10" beam, 5'10" depth, 5'6" draft. Boat in excellent condition. Sleeping accommodations for eight. Deleo generator set with lead batteries new 1926. Very able, heavy boat. Suitable for extended cruising. Hull recently inspected. Apply Eldredge-McInnis, Inc.



FOR SALE—New trunk cabin cruiser, just completed, 34' x 9' x 3' draft, powered with a 40-60 H.P. Scripps motor. The construction of this craft is of the very best and all trim is of mahogany finished bright. The main cabin is fitted with upper and lower berths and the galley is the full width of the boat, entirely separate from the main cabin. Has a small cockpit forward and a large roomy cockpit aft, both self-bailing. This craft is also fitted with mahogany windshield. Owner will deliver this boat afloat with full equipment, excepting bedding, linen and china. For further particulars apply to R. M. HADDOCK, 50 East 42nd Street, New York, N. Y.

HIPPOCAMPUS



IF you have ever read Alfred Loomis' "Cruise of the Hippocampus," you have no doubt wished that you might some day take the helm of this fine little yawl and follow his course to Cuba, Panama or any place you might desire. The present owner of the "Hippocampus" finds that to properly accommodate his family he needs a larger boat so he has reluctantly put the "Hippocampus" on the market. If you would like to be the owner of this famous little ship, go to Johnson's Shipyard at City Island, look her over very carefully,—for she will undergo a rigid inspection; then consult her owner's agent, R. M. HADDOCK, 50 East 42nd Street, New York City, who will arrange the details necessary to make the Hippo yours.

THE MOTOR BOATING MARKET PLACE

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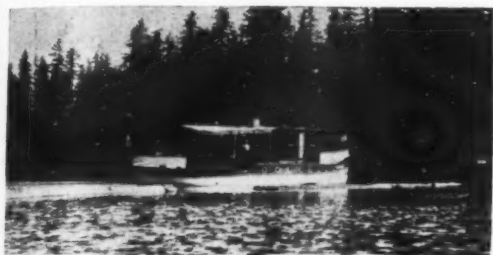
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Opportunities
for the
Motor Boatman

Before you buy or before you sell examine the exceptional buying and selling opportunities under this heading. They comprise the best offers of the month. Please mention MoToR BoatingG.

MoToR BoatingG, 119 West 40th St., New York



FOR CHARTER—On beautiful British Columbia Coast, 57 by 14 deckhouse cruiser, cruising speed 9 knots. Three double staterooms and other accommodations. Radio-equipped. Splendid salmon and trout fishing. Spring and Autumn Grizzly and Black Bear hunting. In Autumn, deer, goat, goose, duck, grouse, quail and pheasant. Salmon and trout fishing March to October. Beautiful scenery like Norwegian fjords. Owner can guide for hunting and fishing. Visit the scenery as depicted in Stewart Edward White's book, "Skookum Chuck." Apply Box 18, MoToR BoatingG.



FOR SALE—35' long, 7'3" beam, 3' draft. Condition A1, oak frame, cedar planking, copper fastened, mahogany deck and cabin, 6 cyl., 44x5 engine, duplicate ignition and oiling system. Now at Lake Hopatcong, N. J. Will be in commission on or before May 1st. Can be inspected now by appointment. Address Box 19, MoToR BoatingG.

MATTHEWS 38' SINGLE CABIN
STANDARDIZED CRUISER

New 1926, completely equipped including 6 cylinder 65-70 H.P. Kermath motor all in perfect condition. Delivery in May. Price \$35,500.00.
BRUNS-KIMBALL & CO., INC.
50 West 17th Street, New York City

FOR SALE

33-Ft. teak, copper fastened, twin-screw. Two Speedway engines. Good condition. Price, \$2,000, if sold at once. Now at Consolidated Shipbuilding Corporation. George Marcander, 30 East 42nd Street.



FOR SALE—Modern seaworthy cabin cruiser, 37' x 9', mahogany trim, new four cylinder Palmer motor, sleeps four, speed nine miles, boat in excellent condition. Dr. H. C. Weidlich, 5 Citizens Bldg., Bridgeport, Conn.

FOR SALE—Hundred foot by hundred foot lot on Manhasset Bay in the new Carl G. Fisher Development, Bayview Colony, Port Washington, Long Island. All improvements completed, including dock and floats, enclosed swimming pool, tennis courts, etc. Boat or yacht can be moored in the best of anchorages 500 feet from lot. Four yacht clubs in immediate vicinity; thirty-five minutes by electric train to Pennsylvania Station, New York City. Would make excellent site for summer or all year home for yachtsman. Address Box 15 Care MoToR BoatingG.

GUARANTEED MOTOR VALUES

4 cyl. 4 cycle with gears:—12 H.P. Universal 24x4 special racing model with overhead valves, racing stacks and one way clutch, \$155. 12 H.P. Universal unit plant, \$165. 12 H.P. Kermath, \$175. 16 H.P. Kermath, \$195. 20-25 H.P. Kermath 1924 model with Bosch magneto, Bosch starter and generator, \$395. 28-35 H.P. Red Wing unit plant, 4x5, \$275. New 40 H.P. Doman 44x6, \$365. 20-25 H.P. Doman 5x6, \$195. 20-25 H.P. Lamb, \$235. 40 H.P. Doman 6x7, \$435. 100 H.P. Van Blerck with starter, \$435. New 50 H.P. Automatic 6½x8, \$785. Also one and two cyl. four cycle models.

Two cycle:—5 H.P. one cyl. Fairbanks-Morse \$45, 6 H.P. American one cyl., \$45. 8 H.P. Gray Model T, two cyl., \$55. 12 H.P. Ferro three cyl., \$65.

BADGER MOTOR COMPANY, Milwaukee, Wis.

FOR SALE—38 foot raised deck cruiser—two years old—fully equipped, very high class boat, can be seen at Abram's Ship Yard, Huntington, Long Island. Inquire Box 21, Huntington, Long Island.



FOR SALE—33-Ft. Raised Deck Cruiser, brand new 30 H.P. Buffalo engine with starter and generator. Boat is exceptionally well equipped and finished. Is as sound as the day built. A remarkable buy. Inspectable around New York.

BRUNS-KIMBALL & CO.

50-52-54 West 17th Street, New York City

UNIVERSAL REBUILT MOTORS

These motors are completely rebuilt and guaranteed like new:

Model C-3 9-12 H.P. Atwater Kent ignition, \$165.00.

Model C-3 9-12 H.P. two unit electric starter, \$265.00.

Model C-2 Flexifour 10-15 H.P. Atwater Kent ignition, \$195.00.

Model C-3 Flexifour 10-15 H.P. Bosch magneto ignition, \$225.00.

UNIVERSAL MOTOR CO.

200 Cape Street, Oshkosh, Wis.

FOR SALE—V-bottom, raised deck Runabout, hull, 23'x5'. Oak frames, cypress planked. Used one summer. Capable of 30 M.P.H. Boat at Morehead City, N. C. Photos, details on request. Daniel, 3229 Idaho Avenue, Washington, D. C.

STERLINGS

6 cylinder Dolphin Special 200 H.P. high speed.

6 cylinder Dolphin 225 H.P. high speed.

4 cylinder Dolphin 150 H.P. high speed.

6 cylinder Sea Gull 150 H.P. high speed.

6 cylinder model FM (Pair) 125 H.P. medium duty.

All completely rebuilt and guaranteed, all equipped with starter and generator—wonderful condition at remarkably low prices.

BRUNS-KIMBALL & CO.

50 West 17th Street, New York City

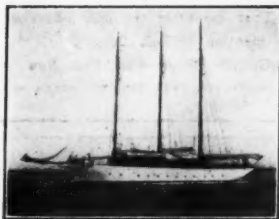
We have to offer a number of decided bargains in engines, as well as boats and equipment. Please state your requirements. A. M. Deering, 1642 Monadnock Bldg., Chicago.

When writing please mention MoToR BOATING, 119 West 40th Street, New York

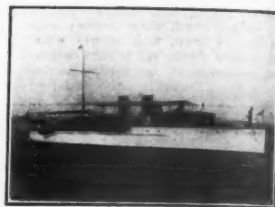
EADS JOHNSON, M. E., INC.

 115 BROADWAY ^{Suite 1425} NEW YORK CITY

NAVAL ARCHITECTS AND CONSULTING ENGINEERS SURVEYORS



MOBY DICK
Surveyed after damage and reconditioned under our supervision.



EL TEJADO
Surveyed and purchased upon our recommendation.

Yacht owners need the services we are competent to render before purchase is consummated; for reconditioning, repairs and particularly for survey of damage under Insurance Policies.

We are experienced Architects and Engineers, and give owners unbiased reports as to values, costs of operation, maintenance and repairs.

Our fees are reasonable and our work guaranteed by 25 years of practical shipbuilding and design of all types of vessels and floating equipment.

"Johnson's Steam Vessels & Motor Ships," a complete Directory of American owned merchant vessels—1927 Edition now ready—invaluable to yacht owners—sent postpaid to any address upon receipt of \$10 per copy.



FOR SALE—The 26-foot cruiser "Red Dog." Pronounced by many as the most complete small cruiser afloat. Built by Elco with a specially designed cabin and cockpit arrangement. Many extras. She may be inspected both afloat and out of the water at Poughkeepsie, New York. Everything in perfect condition. The price is a fair one but not any sacrifice. **FREDERICK L. REID**, care Trussell Mfg. Co., Box 819, Poughkeepsie, N. Y.



FOR SALE—33' x 9'—4 Cruiser. Fully equipped, located in New Haven, Conn. \$200 worth of engine spares. Low price for immediate sale, or will exchange for open runabout. Please address **Mr. E. J. Stone**, care Westinghouse Elec. & Mfg. Co., Springfield, Mass.

FOR SALE—Motor cruiser 32'x9'2". Draft about 3'. Extra fine construction and finish. White pine decks. Cabin trunks, coamings and interior trim mahogany. Toilet room and galley forward, bridge deck amidships, cabin with four built-in spring berths aft. New Lathrop motor, 4 cycle, 3 cylinders. 21 H.P. with starter and generator installed October, 1926, not yet been operated. Electric lights, brass fittings. Cedar and mahogany tender. Box 12, care MoToR Boating, 119 West 40th Street, New York.

25-35 Peerless 4 cylinder 5x6 completely equipped—perfect condition, cheap.

E. MEURY
70 Charles Street, Jersey City, N. J.

Pair 200 H.P. Speedways 8 cylinder completely equipped, perfect condition. Bargain.
BRUNS KIMBALL & CO.
50 West 17th Street, New York City

FOR SALE—Elco Cruisette, built 1924. This boat is as good as new, having been in charge of captain. Completely fitted with every requirement and convenience for immediate cruising. Owner is buying larger craft. Boat may be seen at Sheepshead Bay. For full particulars address Delevan Lumber Co., Varick Ave. & Ten Eyck St., Brooklyn, N. Y. Telephone Stag 4270.

FOR SALE

Sterling four-cylinder, four-cycle 20-35 horse power, in excellent condition, recently overhauled and rebuilt, 600 R.P.M., 4½x5½ weight about 500 pounds, Bosch dual battery and magneto ignition, suitable for cruiser or open boat. Owner installing larger motor. Price, \$340. Apply Box 14, care MoToR Boating, 119 West 40th St., New York.

**W S M—PAIR TO BE REMOVED FROM
CRUISETTE APRIL 1ST, NOW IN
DAILY SERVICE, \$800 F.O.B. JACKSON-
VILLE, PROPELLERS INCLUDED.
GRAY MARINE MOTOR CO., DETROIT,
MICHIGAN.**

CABIN FISHING SKIFF

30'x8'x26"
Completely equipped with 100 H.P., six-cylinder Kermath. Speed, 20 miles. New last May. In perfect condition. Price, \$4,000.00.
BRUNS, KIMBALL & CO., INC.
50 West 17th Street, New York City

WANTED—Small Cruiser, accommodations for two, give full particulars and photo. Box 23, MoToR Boating.

180 H.P. Speedway 6 cylinder model M starter, generator, double ignition, first class shape. Cheap.
BRUNS KIMBALL & COMPANY, INC.
50 West 17th Street, New York City.

FOR SALE, 17 ft. x 5 ft. 4 in. Hydroplane 0 x 5 converted motor, speed 50 M.P.H. J. S. Brown, Box 52, Bellevue, Ia.

FOR SALE—16 foot hydroplane hull just completed. Cypress planking. Good reason for selling. Write for particulars. **Richard W. Jones**, Jr., Constantia, N. Y.

MATTHEWS 38' SINGLE CABIN STANDARDIZED CRUISER

New 1926, completely equipped including 6 cylinder 65-70 H.P. Kermath motor all in perfect condition. Delivery in May. Price \$5,500.00.
BRUNS KIMBALL & COMPANY, INC.
50 West 17th Street, New York City.

FOR SALE—Yacht, "LITTLE FLOWER", 30 ft. long, raised deck cruiser; draws three ft. water; one man control; Frisbee engine, 4 cyl. one room for owner; berths for two or four; one room for crew; 12 miles per hour; kitchen, toilet, electric light, self-starter, dinghy, life-preservers, lamps, etc., complete; ready to go out at once. Can be inspected at Boyce's Wharf, Charleston, S. C. Anyone interested write 119 Broad Street. Phone 837.

Cruiser "Condor" 42 x 10.6 x 3 raised deck and trunk cabin. Perfect condition, completely equipped and priced at \$4,000.00 for quick sale. At Seymour Ship Yard, Northport, L. I. Ask for Captain Seymour.

FOR SALE—26x7 cabin cruiser, 16 H.P. engine. Glass front, canopy top, full equipment. Trailer included to move boat anywhere easily. Cheap. Write for description. **H. C. Demitz**, First National Bank, Wisconsin Rapids, Wis.

FOR SALE—2 cylinder, 2 cycle, 11 h.p. Gray complete with reverse gear, \$100.
8 cylinder, 150 h.p. Van Blerck, thoroughly overhauled, \$400.
Prices low to move quickly.

FOR SALE—Six-cylinder model FM Sterling motor, 125 H.P. at 1200 R.P.M. Used very little and in excellent condition. \$1,250.00.
Richardson Boat Co., Inc., No. Tonawanda, N. Y.

FOR SALE—ELCO Forty-five, three years old, in new condition with many extras. Price \$10,000. **Thomas T. Firth**, Allen Lane, Germantown, Philadelphia.

Cash for old Spark Plugs. Reliable buyers agents wanted. Write for territory. **Sparkplug Products Corp.**, 46 West Kinney Street, Newark, N. J.

REBUILT ENGINES

Give a thought to your motor for next season! Sterling, Kermath, Scripps, Palmer, Speedway; in fact, motors of practically every size, type and make are in our stock of guaranteed rebuilt machines. All of the kinks have been removed; new parts have been installed. They have been thoroughly and honestly overhauled and will give you the same service as new ones at surprisingly low cost. It will pay you to investigate. Buy now while our stock is still complete. We will store it for you until spring at no extra cost.

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50-52-54 West 17th St., New York City

BRUNS KIMBALL & CO.

BRANCH OFFICE:

102 So. 4th St., Philadelphia, Pa.

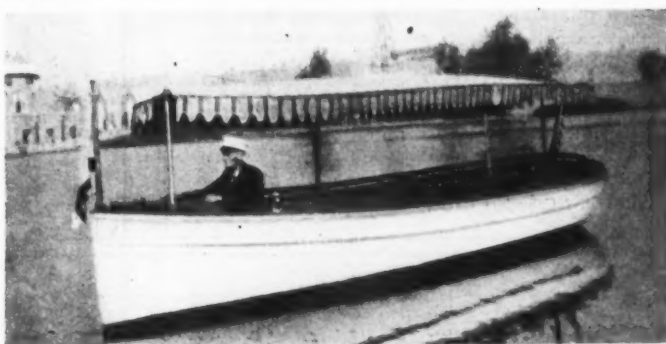
FOR SALE or WILL LEASE FOR SEASON



CANOES GONDOLAS LAUNCHES

These launches cost last summer brand new \$4950. They were used only about 100 running hours.

WHAT WILL YOU PAY FOR THEM NOW?



25 GASOLINE MOTOR LAUNCHES 1926, 25 HP 4 CYL.

32' x 7'4", draft 22"-30", seating 35, suitable for sight seeing, ferry, fishing or club purposes, speed 10 miles, more obtainable, elegant mahogany finish, might be converted into cabin boat. Specially built of best material and used only few months at Philadelphia Exposition. Also 13 IMPORTED VENETIAN GONDOLAS and 50 OLD TOWN CANOES. If you know of any sound proposition where all or part of this equipment can be used profitably (summer or winter) please communicate in strict confidence. Brokers fully protected. E. B. KRACHT, Room 3051, 120 Broadway, New York City. Phone—Rector 3528. Night Phone—Jerome 6215.



MUST SELL

25x2x2 1/2, Frisbie motor, speed about 12 M.P.H. Sleeps two, electric lights. Seen at Spencer's Boat Yard, Cos Cob, Conn., or write Box 17, MoToR Boating.

FOR SALE—Trunk Cabin Cruiser, 33'x9' 30-42 HP Frisbie Motor installed a year and a half ago. Fully equipped. Speed 10 m.p.h. maximum. Heavily built and sound in every way. Bargain as she must be sold. Address C. E. M., Drawer 1111, Middletown, Conn.

FOR SALE—Continental Van Blerck Model 250, 40 H.P. with electric starter, never used, in original crate, best cash offer takes it, bought Chris-Craft Cadet complete. E. F. Schmalitz, 215 Wyoming Avenue, Kingston, Pennsylvania.

RUNABOUT—20 to 30 miles per hour, 20 to 22 ft. overall length. Give full particulars and lowest cash price. Address R. v. Schleinitz Harnischfeger Corp., Milwaukee, Wis.



ELCO 34' CRUISETTE

Two seasons old; run less than 1,000 miles; full equipment with many extras, including compass, searchlight, chairs, special awning, mirrors, etc. Perfect condition, in commission, \$3,700.00.

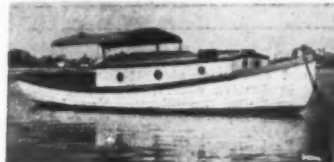
BRUNS-KIMBALL & CO., INC.
50 West 17th Street, New York City

25 FT. SEA SKIFF with enclosed windshield, engine F4 Scripps, speed 15 miles, used one season, perfect condition. G. A. Hensler, 73 Wilson Ave., Newark, N. J.

WANTED—30-40-foot used cabin cruiser in good condition. Send photographs and plans with lowest cash price to E. R. Graham, 1366 Marlowe Ave., Lakewood, Cleveland, Ohio.

FOR SALE—60-ton Nova Scotia sailing schooner with auxiliary power. Write for particulars. The McClearn Company, Liverpool, Nova Scotia.

FOR SALE—Auxiliary Catboat, 25'x10 1/2', with Red Wing 10 H.P. motor. Bruns, Kimball & Co., 50 West 17th Street, New York.

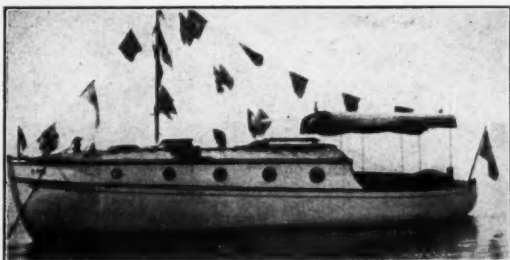


FOR SALE—Sea Bright cruiser, 34'x10'x33", new N. R. 4 cylinder Palmer, speed 10-12 miles, sleeping quarters separate from rest of boat, electric lights, toilet, 3 burner alcohol stove, 200 lb. icebox, complete equipment. Boat and engine first class in every particular. Now in commission. Price \$2,000. Write, Wm. W. Robertson, 1047 Hanover Ave., Norfolk, Va.

35 H.P. Kermath medium duty 4 cylinder starter, generator, double ignition, Paragon gear, rebuilt and guaranteed—very low price.
BRUNS KIMBALL & CO.
50 West 17th Street, New York City.

FOR SALE—Hand V-bottom, mahogany deck, engine forward under hatches, 24'x5'9" controls to steering wheel. Seats three cross seat amidships, three in wicker-craft chairs in cockpit. 50 H.P. Kermath new 1924. Operated few weeks 1924 and 1925 only. Electric starter, double ignition, 25 gal. steel tank, cushions, anchors, lights, pyrene, tools, etc. Price \$1,200 complete, a trifle more than cost of engine. George W. Mercier, Clayton, Thousand Islands, N. Y.

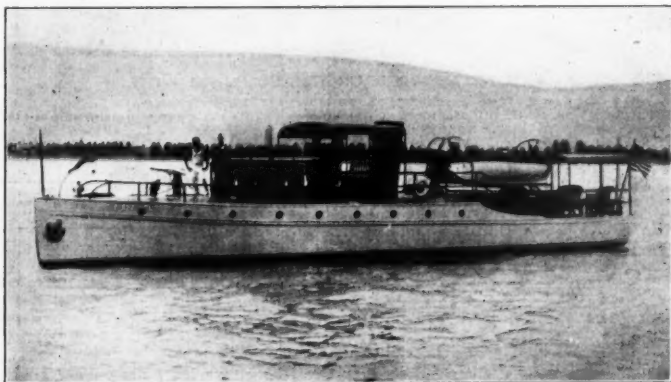
When writing please mention MoToR BOATING, 119 West 40th Street, New York



Lawley Cruiser, 32' 11" x 9' x 3', built for small cruiser class Bermuda races 1921. Like new, thoroughly overhauled inside and out including engine. Ready to sail without additional dollar expense. White oak frame, cedar planking, copper fastened. Heavy duty motor, generator, double ignition. Installed last summer. Electric lights, radio, running water, wicker chairs, folding lavatory, toilet, dinghy, large mahogany cockpit. Fully equipped. Private stateroom. Cruising speed 10-11 miles. Wonderful Sea Boat. Owner buying larger boat. Price attractive. Dr. Wm. Graf, 2 Columbus Circle, N. Y. C.



FOR SALE—"Maple Leaf IV." Reputed the fastest boat in Europe. Twice winner of the British International Trophy and winner of the British Sea Mile Contest in 1925 and 1926. Five Step Fauber-type Hydroplane, length 40 ft., beam, 8' 6". Double-skin. Copper Hand-sewn Consuta Mahogany, beautifully matched timber, no Butt Joints, 2-12 Cylinder 400 H.P. Packard Liberty Aero Motors. Speed 48 knots (55 miles per hour). Seating Capacity can be provided for 8 to 10 persons. Cooling by fresh water. Water-cooled Gear Boxes, Clutch Reverse and Starting Gear on Port Motor. In perfect condition, just been entirely reconditioned and ready for immediate delivery. The whole Power Plant and Mechanical Installation is either new or of the most recent design. Price \$7,000 at Southampton, England. H. O. N. Shaw, 112 Wardour Street, London, England. Telegrams "HON-SHAVIUS, WESTCENT, LONDON."



FOR SALE—At one-fourth reproduction cost. 62' x 13'-3" x 3'6". Strictly modern throughout. Most completely equipped yacht of its size. Slow speed engine giving a cruising speed of 11 miles and the maximum speed of 15 miles per hour. Large double stateroom, cabin, galley, and deckhouse. Large full headroom engine compartment. Bathroom with full size tub. Two toilets. Hot and cold and drinking water throughout, pressure system. Hot water heat in all rooms. Bronze electric windlass, cannon or tripode, Delco Lighting System. Address "Yacht," Machinery Club, New York City.

HAVING purchased a new boat, will sacrifice the finest and most able 41-foot Trunk Cabin Cruiser in Eastern waters. Boat and equipment in new condition throughout. New Lathrop 4-cylinder, 4-cycle, 40-horsepower motor, 1924; new lighting system and ice box, 1926. Firm price, \$7,500. Bert H. Manheimer, 20 West 47th St., New York City.

FOR SALE—High class speed boat or runabout, 23 feet, able; selected white cedar planking to seasoned oak frames, brass and copper fastened. Mahogany and rosewood coaming and trim. A beautiful job. Built by master builders. Powered with 100 h.p. Hall-Scott, starter, reverse gear, etc. Both boat and engine guaranteed, or no sale. Never run over 200 miles, practically new. Deliver her anywhere in the East. Sacrifice, \$1,600. Communicate with owner. Seth P. Taylor, Salisbury, Maryland.

DESIROUS TO RENT

for about two months in the summer, preferably July and August, cruiser (32-38 ft.) sleeping accommodations for four, etc. Answer Box 21, MoToR Boating.

MATTHEWS 38' SINGLE CABIN STAND-ARIZED CRUISER

New 1926, completely equipped including 6 cylinder 65-70 H.P. Kermath motor all in perfect condition. Delivery in May. Price \$5,500.00. BRUNS KIMBALL & COMPANY, INC. 50 West 17th Street, New York City.

FOR SALE—54 foot Auxiliary yawl rigged keel Yacht, 15 foot beam, draft 6 feet; accommodates six comfortably in addition to crew. Luxurious cabin with all improvements and appointments (electric lights, running water, toilet and spacious galley. Inventory and equipment complete. Canvas first class condition. Inquire P. O. Box 1301, New Haven, Connecticut.

FOR SALE—22 ft. V Bottom Runabout. Auto controlled, powered with twin gray motor, 18 H.P., capable of making 22 miles per hour. Hull and Motor in A1 condition. Priced reasonable. W. J. Schumacher, Shawano, Wisconsin.

FOR SALE—Day cruiser 28'x6', seats twelve, as semi-cruiser sleeps three. Standing tops, mahogany decks and finish with exceptional workmanship. Electric equipment and lighting throughout, storage batteries. 25 H.P. Sterling engine. Speed fourteen miles. R. E. Russell, 117 West 188th Street, New York, N. Y.

FOR SALE—4 Marine Engines at attractive prices. 20-25-60 H.P. 3 and 4 cylinders. Built for salt water use. CLIFTON B. DRAKE, 509 Cherry St., Philadelphia, Pa.



FOR SALE: Double cockpit all mahogany Runabout, 26' x 6', copper fastened throughout. New June 1925. Scripps F 6 100 h.p. engine, new Spring 1926. Fully equipped, many extras. Boat and engine in perfect condition. Now at Huntington, L. I. Price \$2,000.00. S. J. Cunningham, 125 Riverside Drive, New York City.



CHESAPEAKE BAY rig sloop with raised mast, 38 ft. x 10 ft. x 3 ft. draught. Built of cedar, has 20 ft. cabin, 4 berths and equipment in perfect condition, good as new. Boat built in 1917, has 30 x 45 h.p., 5 1/2 x 6" stroke Sterling. Seen at Rea's North Beach, Flushing Bay. Write to F. HURTIG, 23 Kaufman Ave., Little Ferry, N. J.

RAISED DECK CRUISER—28'x8'x26". New 1923 Brehman 4x5 motor. Electric cabin and running lights. Spring berths, toilet, good galley, refrigerator. Permanent top, glass enclosed forward, rain tight curtains for cockpit. Flat bottom dinghy. Boat located at Erie, Pa. Price, \$1,200. Dr. M. L. Smith, Titusville, Pa.

FOR SALE—A pair of six-cylinder direct reversing Standard heavy duty engines. These engines have had very little use, the best of care, have been reconditioned and are in first class shape. M. H. Alworth, Tarpon Springs, Fla.

26' MAHOGANY RUNABOUT. Marguerite V-Type, Crouch design. Model F-6, 100 h.p. Scripps Marine Engine. Boat and engine new July, 1926. Used only two months, condition like new. Will accept less than half the original cost. HOLT MARINE ENGINEERING CORP., 611 W. 125th St., New York City.

180 H.P. Speedway 6 cylinder model M starter, generator, double ignition, first class shape. Cheap. BRUNS KIMBALL & COMPANY, INC. 50 West 17th Street, New York City.

For Sale Famous Cruiser VICTORY II



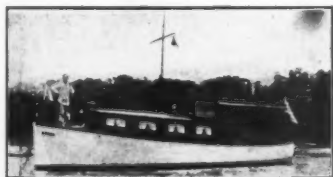
Designed and built by Luders, this 36 footer is the best known small cruiser on Long Island Sound and Eastern waters. This boat has had unusual care, being owned by a yachtsman who takes pride in keeping his craft in best shape and trim, both afloat and ashore. The hull, power plant and equipment are in perfect condition. Copper fastened. Bright decks and cockpit floor. Mahogany joiner work. Cabin white enamel, mahogany trim. Sterling motor, 4-cyl. $4\frac{1}{2}$ x $5\frac{1}{2}$. Speed 10 miles. Bosch Magneto. Gas capacity, 125 gals. Water capacity, 75 gals. Electric light throughout. Generator, battery, etc. New awning and winter cover 1926, side and front curtains, skylight cover, etc. Small boat. New leather cockpit and engine room, cushions, rugs, etc. Tapestry covered cabin spring cushions, pillows, etc. Alcohol stove. Ice box capacity, 200 lbs. Cabin carpet, curtains, rugs, etc. Full length mirror in clothes locker door. Fully found for cruising. Is absolutely sound, motor in A-1 shape with carbon scraped and valves ground. Coat of bottom paint and ship is ready to go overboard. Owner has purchased larger vessel. Address Box 3, MoToR Boating, 119 West 40th Street, New York.



FOR SALE—Auxiliary Sloop, 27 ft. by 11 ft. 6 in. by 40 in., built on salt water heavy construction, excellent condition, including all necessary equipment ready for cruise. Shipmate range, spring berth, toilet, ice box, sink, 15 horsepower Frisby Heavy Duty motor, speed under power $8\frac{1}{2}$ miles per hour. 10 ft. Tender goes with boat. Will sell reasonable for cash. O. W. Cuyler, Union Hill Canning Co., Union Hill, New York.



FOR SALE—Well built auxiliary centerboard sloop—35' x 9' x $3\frac{1}{2}$ '—New 50 H.P. Kermath engine—Rigging spars and sails—Fine condition—Equipment complete—Solid mahogany trunk cabin—Full Headroom—Galley—Toilet—Stove—Bohn Refrigerator—Sleeps four—Excellent sea boat—fast and able—easy to handle. Inexpensive to operate—Extraordinarily well built. Had best care. Owner purchased larger boat. Price reasonable. Frank Aranow, 27 Cedar St., New York. John 4535.



FOR SALE—30 x 9 cabin cruiser; built 1922; 30 horse power Lathrop engine; mahogany finish; 17 dinghy; electric lights, etc.; fully equipped; inspectable New York City. Price \$5,000, strictly net.

BRUNS KIMBALL & CO.
50 West 17th St., New York City

FOR SALE—A beautiful summer home located on the Bay of Quinte, Prince Edward County, Ontario. Solid stone, nine rooms. Could not build it for twenty thousand dollars. Good bass fishing one hundred feet from front door. Good view over the bay. Fifty acres and fair outbuildings. Price for quick sale ten thousand dollars. Terms arranged to suit. Also six furnished cottages in Lake Muskoka, cheap. S. A. Conklin, R. R. No. 2, Picton, Ontario.

WANTED

50-60-foot twin-screw Cruiser in first-class condition. Want to exchange plantation of 805 acres, valued at \$30 per acre, as part payment. 5-room bungalow with all improvements, caretaker's house and room for one servant. Small shop and barn. 2,300 feet of river frontage, wonderful trees. Situated on John's Island, South Carolina, four miles from Charleston by water and seventeen miles by auto. Address MoToR Boating, Box 22.

CRUISERS—77'x14', \$20,000; 67'x13', \$22,500; Houseboats, 52', \$10,000; 65', \$20,000; 80', \$10,000; New Aux., 50'x15', 30 H.P. oil engine; Aux. Ketch, 50'x14', \$3,500. Diesel Yachts, 100'x150'. Steel passenger and freight boat, 120 H.P. oil engine. Harry B. Becker, Box 389, Miami, Fla.

FOR SALE—Speed boat 34x7". Designed by John L. Hacker; equipped with Liberty motor; speed 40 miles per hour. Hull and motor in the best of condition. Price \$5,000.00 Earl Holley, Holley Carburetor Company, Detroit, Michigan.

FOR SALE—Most desirable boat works and boat yard at end of New Jersey's Inland waterway. Two shops, large water frontage, deep water to runway and large storage room.

Price very reasonable. Write for particulars. W. K. Potter or S. B. Mainright, Manasquan, N. J.

FOR SALE—Mahogany 151 racing boat, complete. Reg. B-76. Hadley-Plane hull. Erd 151 motor. New last season. In best of condition. Will sell separately. F. M. Baker, Saranac Lake, N. Y.

FOR SALE—Real boat on which the owner has lived comfortably for two summers, glass cabin, 39 x 9. A Palmer 24 H.P. motor and an independent generating set. It is tight, fast, cool and comfortable. Geo. L. Clarke, 133 Forrest Ave., Yonkers, N. Y.

20' SEA SKIFF—Yacht Tender design. Substantial construction, well finished. Exceptionally seaworthy. Model F-4 Scripps, 16-18 M.P.H. Boat and engine in best of condition. Priced at \$950 for quick sale. HOLT MARINE ENGINEERING CORP., 611 W. 125th St., New York City.

GOOD AS NEW MARINE ENGINES

4½ H.P. 1 cylinder	4½x5	Anderson	\$190
8½ H.P. 2 cylinder	4½x5	Anderson	338
20-30 H.P. 4 cylinder	4 x5	Anderson	500
50 H.P. 4 cylinder	7 x8½	Anderson	1050

Completely equipped and fully guaranteed. Write for complete list. **ANDERSON ENGINE CO.**, 4232 Lincoln Ave., Chicago.

FOR SALE—Fay & Bowen Runabout, nearly new. 30 ft. long, 6 ft. 4 in. beam, 23 in. draft. 60 H.P. Fay & Bowen motor. Speed 22 miles. Starter and generator. Planking of clear Southern Cypress, decking and interior of mahogany. A wonderful sea boat. Cost \$4,200. Will sell cheap as owner has bought larger yacht. For further information write, Faber Gooding, Lockport, N. Y.

SEA SLED—25-FOOTER HISPANO SUIZA CONVERTED MOTOR. OUTFIT IN PERFECT CONDITION. \$1,500—TO FIRST BUYER. D. B. ROBERTS, BOX 1341, HARTFORD, CONN.

NEW all mahogany V bottom trunk cabin cruiser, 31x10—E-4 Scripps motor; also new all mahogany 22 ft. 6 in. over all x 7 ft. beam. Hacker design speed hull. John Lockmeyer, Roslyn, L. I., N. Y.

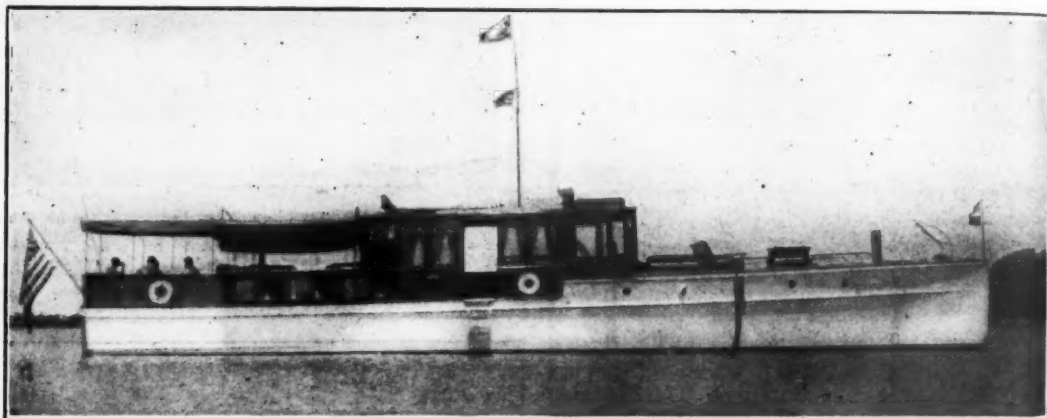
STERLINGS

6 Cylinder Dolphin Special	200 H.P. high speed.
6 Cylinder Dolphin	225 H.P. high speed.
4 Cylinder Dolphin	150 H.P. high speed.
6 Cylinder Sea Gull	150 H.P. high speed.
6 Cylinder model FM (pair)	125 H.P. medium duty.

All completely rebuilt and guaranteed, all equipped with starter and generator—wonderful condition at remarkably low prices.

BRUNS KIMBALL & COMPANY, INC.
50 West 17th Street, New York City.

A Real Bargain in a Real Boat!



This 66-foot Herreshoff-built gas screw yacht "Memory," 11-foot beam and 4-foot draught, modern, comfortable and suitable in every way for either northern or southern cruising, is for sale.

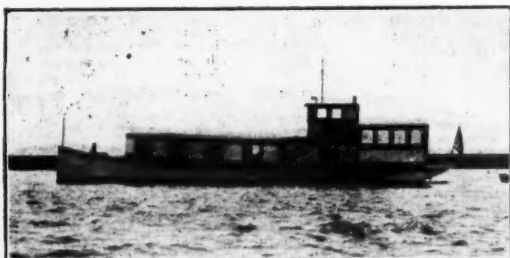
Built in 1919 it was as good as new last year when cabins and upper works were rebuilt and greatly improved.

Accommodations include large stateroom with two spacious berths, toilet and dressing room; dining salon, with berth and toilet together with special racks and lockers; roomy galley, with large ice-box, new Protane gas range and oven and sink; fo'castle, with four berths, toilet, etc.

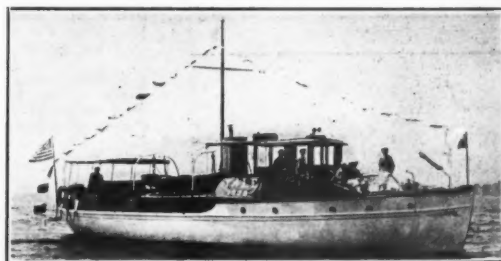
Two 290-H.P. Sterling Dolphin engines, bought from Sea Sled Corporation year ago, and run under 1,000 miles when installed; cruising speed, 23 knots.

Delco lighting system, new Willard glass cell storage batteries, 14-inch barrel searchlight, electric fans, electric winch, vacuum cleaner, rugs, etc.; in fact, equipment is most complete and in perfect condition. Tender with boat.

The "Memory" can be bought right and must be seen to be appreciated. At the price it will not long remain on the market. For further information, inspection, etc., apply Frank H. Smith, Box 1561, New Haven, Conn.



If you have desired to own a cruising houseboat that is easy to handle, economical to run and on which you and your family can live during the Summer months the above boat will meet all your requirements. It is fitted with every modern device to make it efficient and comfortable. Details on request from L. H. Wright, 360 So. Long Beach Ave., Freeport, N. Y.



FOR SALE OR CHARTER

Beautiful 65 x 13 x 4 cruiser. Sterling Motor, 6 cylinder 6 1/2 x 9, 90 horsepower. Exceptionally fine seaboard, every modern cruising convenience. Private state-room for owner, large dining saloon, sleeping accommodations for eight people. Exceptionally large galley, bath room with bath tub. Full equipment including power launch and row boat. Deck controls, large bridge. This yacht is a bargain and will be sold this Spring. Very reasonable price for two to three month's charter. Might consider trade for New York City Real Estate. Address owner or your own broker. JAY A. MELLISH, 312 West 60th St., New York City.

WANTED—Employment by experienced hand. Familiar with boats and engines; capable of taking charge. Familiar with Long Island Sound, Narragansett and Buzzards Bay. Address Box 20, Motor Boating.

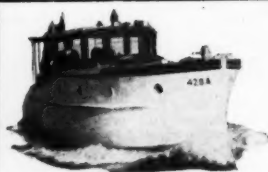
35 H.P. Kermath medium duty 4 cylinder starter, generator, double ignition, Paragon gear, rebuilt and guaranteed—very low price. **BRUNS KIMBALL & COMPANY, INC.** 50 West 17th Street, New York City.

WANTED—Modern auxiliary about 55 overall in A-1 condition in exchange for modern 41-foot trunk cabin cruiser in new condition. Will pay any difference in actual value in cash. **BERT H. MANHEIMER**, 20 West 47th Street, New York City.

WILL SELL 16 foot flat bottom motor skiff of substantial construction powered with an inboard Evinrude engine, 5 h.p. Suitable for children, as boat is broad and stable. Price moderate. **F. W. Horenburger**, 4263 Byron Ave., Bronx, N. Y.

YACHT CLUB MEMBERSHIPS

The Hudson River Yacht Club is prepared to accept new members under advantageous conditions. Attractive clubhouse, restricted membership, good anchorage, most convenient location. Commodore Arthur Russell, Hudson River Yacht Club, West 92nd Street, New York City.



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Richardson Cruisers in New York

The Richardson Boat Company, Inc. of North Tonawanda have appointed Wilbur H. Young & Company of New York as distributors for the Richardson standardized 26 foot cruiseabout. This boat will be handled in the New York territory by this firm who will have a sample on display in their show room at 206 West 59th Street, New York, N. Y. Mr. Richardson states that in this connection, the Richardson Boat Company has obtained the very best outlet for their product in the New York territory and anticipating the greatest year in the history of the company. In this same connection the Marine Equipment and Supply Company, 116 Walnut Street, Philadelphia, Pa. have taken on the Richardson line. This company is an old established house in the marine industry and the Philadelphia district will be served as effectively as the New York territory.

MOTOR BOATING Yard & Shop

(Continued from page 58)

Benjamin Carpenter Dies

Benjamin Carpenter, well known to many yachtsmen, died in Chicago, February 23rd, at the age of 61 years. At the time of his death, he was President of Geo. B. Carpenter & Co., one of the pioneer Marine Supply Houses in this country.

After graduation from Harvard in the class of '88, he entered the employ of the firm of which he ultimately became President. For many years he took a leading part in all yachting activities centering in Chicago, and was one of the founders of Inland Lakes Yachting Assn.

On the entrance of The United States in the World War, Mr. Carpenter although past service age, offered himself as a candidate to the Quartermasters' Department, was promptly accepted and assigned to duty in Philadelphia as Captain Q. M. R. C. Much of the equipment of tents and paulins used by the American Expeditionary Force was purchased under his direct supervision. He was promoted to the rank of Major during service, and at the termination of the war was retired with the rank of Lieutenant Colonel.

During his later years Mr. Carpenter although not actively participating in yachting events, continued his keen interest in all branches of the sport, and his splendid sportsmanship and sound judgment were at all times examples to the younger men following in his footsteps.

A son, Benjamin Carpenter, Jr., himself an enthusiastic and skillful yachtsman, and an officer of Geo. B. Carpenter & Co., carries on his father's interest in yachting. Two years ago, as owner and skipper of the R Type Boat Sari, the much sought first prize in the Mackinac Race was added to the Carpenter laurels.

Motor Boat Mart in Chicago

An innovation in motor boat selling has been undertaken in Chicago through the energy of Hub Erickson, head of the Erico-Kainer there. The thought originated several years ago, and through his persistence a lease has been obtained on a magnificent show building and the marine trade invited to cooperate. A dozen live wire manufacturers have already agreed to support the proposition, and Hacker & Fermann of Detroit among the first were closely followed by the Dunphy Boat Company and the Al Schillo Company. The Christensen Boat Company and the Indian Lake Boat Company were also on the job early, and have boats at the exhibit by this time. The engine builders were also enthusiastically for the show, and Jack Farr of the Kermath Company promptly sent his engines. The Scripps Motor Company, the Red Wing Motor Company, Dan Kidney & Son, as well as the Gray Marine Motor Company also promptly accepted the invitation, and in the special outboard section the Johnson, Evinrude, Elto, and Lockwood outboards are in evidence. The building is located at 1725 Diversey Boulevard, and has ample frontage and floor space to display all exhibits to the best advantage. The fact that a display of this kind will sell boats and engines, was well demonstrated the day before the unofficial on March 1. Exhibits were being crowded to the doors as fast as possible, when three men idled in through the back door, with the intention of buying an outboard motored job. They grew so enthusiastic at the display, that they took with them a Dunphy runabout, with a Universal engine, a Dan Kidney small boat with a Lockwood engine, as well as a Gray engine.

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

Speed

That makes
no sacrifice
of Safety!



The New SEAHAWK by Mullins

The new Mullins Sea Hawk, is designed for speed and makes it with either a big twin or light twin outboard motor.

And still there is no more seaworthy boat. It has ample beam and free board. It is steady in the water. Life-boat air chambers make it unsinkable—Mullins guarantees that. Armco Ingot iron makes it the ideal boat for every climate, for fresh or salt water.

The Sea Hawk will outlast several wooden boats. It needs no more care than an occasional coat of paint—you don't even need a boat house. When winter comes turn it upside down on the beach. When spring comes, turn it over and shove it into the water. And so on year after year.

From every point of view—speed, seaworthiness, sturdiness, good looks the Sea Hawk is the seagoing sensation of the year—and all for ninety-nine dollars.

MULLINS METAL BOATS

MULLINS BODY CORPORATION
Boat Division, 190 Depot St., Salem, Ohio
Please send me complete information on the new Sea Hawk—also your catalog showing the other Mullins Metal Boats.

Name _____
Street and Number _____
(or R. F. D.) _____
City (or County) _____ State _____



Eldredge-McInnis highly endorse Jeffery's Marine Glues

PAINSTAKING devotion to details, an infinite capacity to "follow through" a job to its successful completion marks the work of Eldredge-McInnis, Inc., Naval Architects, of Boston, Mass.

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Signed ELDREDGE-McINNIS, INC.
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It pays to use Jeffery's Marine Glues—a product that has won highest honors for more than 80 years. Our booklet—"Marine Glue—What to use and How to use it"—sent on request.



L.W. Ferdinand & Co.
152 Kneeland Street, Boston, Mass.

All Hands—To Work

(Continued from page 18)

in the bottom of a gasoline tank does not interfere with the operation of a boat, as sufficient clean fuel is above this to feed the engine without any of the dirt going through the line. It is usually on a rough day that this sediment gets stirred up, and works its way to the carburetor, finally resulting in a stopped engine. Every effort should be made to clean out all of this dirt, and insure against this happening to you. Electrical equipment on the engine should also be overhauled. It is quite customary for such fittings as magnetos, starting motors, generators, etc., to be removed to a dry locker or the home of the owner in the fall. If this has been done, there was plenty of opportunity to clean the several parts, polish down the commutators, supply new brushes where necessary, and repaint as advisable. If this work has been done, these fittings are ready to replace on the engine without further delay. If not, this work should be done at this time.

Practically every boat in these modern times carries storage batteries for one purpose or another. If they are not provided to handle the starting and ignition of the engine, they are used for lighting purposes at least, and require a certain amount of attention and care. Batteries of the lead plate type require more or less frequent charging, whether they are in service or not. Therefore, all batteries of this nature will have been removed from the boat, and used at home to run the radio set, or else stored in a battery service station, where they can be kept charged from time to time as necessary. There is only one type of battery which will hold its charge throughout a winter season, and this is of the alkaline type. A fully charged battery will not freeze, but one which is discharged is very likely to, and if this happens, the battery is no longer serviceable. The container will be split, and the solution lost. This will not alone damage the cell, but is likely to damage any wood or metal work in the vicinity with which it comes in contact. The safest plan is to have the battery properly taken care of during the winter and delivered fully charged when wanted.

Having cleaned up and refinished all of the mechanical and interior work on the boat, we can now turn our attention to the outside work. Possibly the largest field of endeavor here will be the boat's bottom. This portion of the hull is subject to much abuse both in the water and out. Naturally the purpose of the hull is to keep the water out, and it is desirable to have the hull in such a condition that no leakage takes place. In order to accomplish this, all the seams should be carefully closed, and well caulked. Caulking a boat is an art in itself. The most frequent mistake that amateurs make in this direction is to drive into the seams enormous gobs of cotton, far in excess of what is required to do the work. The effect of this is not only to make a very tight joint, but to have a tendency to force the planks away from the frame later on, when they become wet and swollen. Any seams in bad condition may require recaulking, although the probabilities are that a filling of the seam with new putty or seam compound will be more than sufficient to do the job well. There are a number of specially prepared compounds available, which are excellent for this work. These can be applied into the seams, and will result in a smooth elastic finish, which has the advantage of being plastic to the extent of allowing reasonable swelling and contraction of the planking, without spewing out the caulking or compound. There are always some little places about the boat where a tendency to leak exists, and these should be gone over carefully and the leaks stopped. A point which should not be forgotten is the stuffing boxes on the propeller shafts and on the rudder post. These require repacking each year, and it is false economy to try to make the old packing do for another season.

The final refinishing of the outside of the hull is something which should be deferred until the last week before the boat is due to go overboard. Naturally, the outside will require several coats of new paint on both the topside and bottom. As is frequently the case, when the boat is on shore, dust and dirt will settle on the decks, and any slight shower will wash this down on the top sides, and leave many dirt streaks on the new paint. For this reason the final coat should be delayed until it is reasonably certain that no further dirt will wash down before the boat is launched. It is also well to repaint all decks and cabin tops before the sides are finished, so that they can be thoroughly cleaned and reasonably dust free before the final white is applied. It is worth while finishing off the cabin houses with some form of aluminum, or possibly copper drip moulding, which would serve to lead the slight rainfall to such a point where it can be conducted overboard through a scupper or suitable drain, which will not come in contact with the white paint. It is not the large volume of water which flows over the decks and sides during a heavy rain which does the damage, but rather the slow trickle which comes as a result of the light rains which

(Continued on page 88)



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AT Miami Beach nature displays her grandest charms in April—the closing month of the season. A month of continuous sport, entertainment and social activities. Visit MIAMI BEACH now! Come to this wonderland of the South while conditions for play and recreation are at their best. For particulars and hotel reservations address:

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MIAMI BEACH FLORIDA

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NO!



WOULD this instrument board arrangement—be your idea of Upt'date?

NO!

ASSUMING that—WE AGREE THEN!



Unit Control
by Elgin
and nothing else will satisfy you
Simply address

TACHOMETER DIVISION

ELGIN NATIONAL WATCH COMPANY
35 E. Wacker Drive Chicago

All Hands—To Work

(Continued from page 86)

just carry the dust along without a sufficient volume of water to wash it away quickly. This same difficulty arises when the boat is in commission later on in the summer. The dew in the morning is frequently sufficiently heavy to run down over the decks and the sides. This will carry enough dust to streak a boat badly, and if this relatively small volume of water is conducted away without coming in contact with the sides of a cabin house or of the boat, it will result in a much cleaner boat. A little care given to this detail at this time will save much energy which would otherwise need to be expended in scrubbing down the white paint.

Thus far nothing has been said about the methods required to clean down accumulated paints on cabin tops or hulls, and which may be so thick as to require this. Paint when applied to canvas in heavy coats, season after season, will crack and chip in time to such an extent as to require its entire removal. When this becomes necessary, the boat owner is confronted with a difficult task. While the canvas underneath the paint may still be in good condition, the paint surface is badly checked, and the only way in which a good job can be made is to either replace the canvas entirely with new material, which is a costly job on account of the fact that many deck openings and fittings must be removed and replaced. Moldings and skylight structures naturally suffer in this operation, so that this secondary replacement which is necessary may run into more cost and trouble than the actual canvas required for the deck. A much simpler way to do this would be to take the old paint down with paint removers. The chemical action of these solvents is such as to soften the paint, and permit of its being scraped off quite readily. It may require several repeated applications before the old paint is entirely off, but when this has been done, a much more worth while job of refinishing can be done. Before repainting is started on a cleaned down canvas, it should be washed with gasoline to remove all traces of paint remover. It is also advisable to thin down the paint which is applied to decks much more than is usual in other cases.

The outside of the hull is also in occasional need of cleaning down, and if this is the case, the simplest way to accomplish this would be by burning off the old paint with a gasoline blow torch. There is a certain technique about using a torch for this operation which removes some of the danger from this task, and at the same time facilitates it so that it will be accomplished most expeditiously. The accepted practice is to take a good torch in the left hand, and apply it to a starting point on a plank, and immediately the paint begins to blister, move the torch slowly to the left, and follow it closely with a broad bladed putty knife, which will clean off practically the entire thickness of paint in one going over. Do not burn too far in advance of the knife, as the paint will harden again on cooling, and once it has been charred it will not soften again as freely as the first time. After the first time over, during which the bulk of the paint has been removed, it will be well to go over the work again, cleaning up any small spots that were skipped the first time. Do not try to burn every last trace of paint from the hull, as the sandpapering operation which must follow will take off any remnants which are still present. After a hull has been burned down, it is necessary to repaint it, and this will naturally require from three to four coats of paint before a satisfactory surface is built up. The first coat should be thinned down, and the remaining coats applied in the proper strength of the paint. Allow sufficient time for the several coats to dry, and remember to sandpaper between each coat.

Much of the trim and finish of a boat's structure is finished natural with varnish. A peculiar characteristic of varnished surfaces is, that if they are taken care of they will depreciate very little, whereas if they are neglected, they will go very fast. Oak is a particularly hard wood to keep bright and light in color. The tannic acid in the wood has a tendency to discolor it and blacken it badly when exposed to the weather. A good coat of varnish will seal the wood, and prevent this for a considerable time, but once the moisture gets under the varnish it will stain quickly. Mahogany does not stain in quite the same way, although there is a gradual changing of color which takes place in time, but which is not a problem, particularly if the color changes uniformly. All bright work which has suffered to such an extent as to require refinishing should be cleaned down with varnish remover or scraped. The use of varnish removers for this is to be recommended, as they will do the work without requiring the physical effort which scraping does. It is also easier on the material, since there is less chance of a slip with a sharp scraper which will cut a gash in the work at a point where it will be most conspicuous. The use of the removers follows the rules mentioned in refinishing the decks, and for all work of this kind, the operator should see that only a

(Continued on page 90)

A Few of the Boat Builders Who Use Universals

Thompson Bros. Boat Mfg. Co.
Peshtigo, Wis.
Mathis Yacht Bldg. Company
Camden, N. Y.
Consolidated Shipbuilding Corp.
Morris Heights, N. Y.
New York Yacht Launch & Eng. Co.
Morris Heights, N. Y.
Defoe Boat & Eng. Company
Bay City, Mich.
Ditchburn, Ltd.
Gravenhurst, Ont., Canada.
Luders Marine Const. Co.
Stamford, Conn.
Matthews Company
Port Clinton, Ohio
Geo. Lawley & Sons Corp.
Neponset, Mass.
Fellows & Stewart
Wilmington, Calif.
Chance Marine Const. Company
Annapolis, Md.
Everett Hunter Boat Company
McHenry, Ill.
Richardson Boat Company
N. Tonawanda, N. Y.
Dan Kidney & Sons
De Pere, Wis.
Geo. Backus & Sons
Ft. Pierce, Fla.
Port Carling Boat Co.
Port Carling, Ont., Canada.



Mullins 18-foot "Leader" launch, Mullins Body Corp., Builders, Salem, Ohio. Universal Flexifour Standard Equipment.



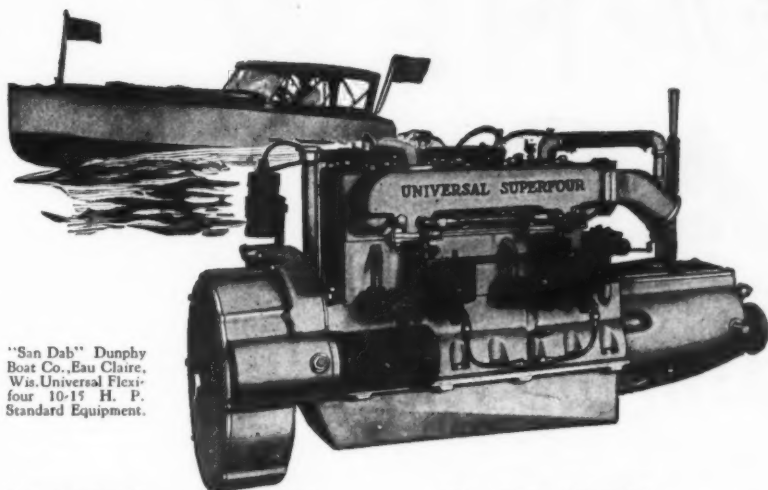
Lewis 22-foot Runabout, Lewis Boat Co., Oshkosh, Wis., Builders. Speed 22 miles per hour with Universal Super-four GLH as standard equipment.



**Universal
Silent Reduction Drive**
—for cruisers and heavy boats

Universal GLS Super-four, with Universal Silent Reduction Drive, turns this 24"x 18" wheel 775 R. P. M. Gears guaranteed against wear for 5 years. Far less motor weight, far more space in engine room. Gains the propeller efficiency of a heavy, slow speed motor without any of its disadvantages. Wider speed range, easy maneuvering. Fuel and oil savings that make it profitable to throw away old style heavy motor.

Universal's popular Silent Reduction Drive is available with Flexifour as well as Super-four.



"San Dab" Dunphy Boat Co., Eau Claire, Wis. Universal Flexifour 10-15 H. P. Standard Equipment.

"Who Uses All These Universal Motors?"

VISITORS at the Universal plant are always amazed by the large number of motors undergoing final testing and careful packing for shipment. Even boatmen acquainted with Universal's success marvel at the sight they see and almost invariably ask, "Who uses all these Universal Motors?"

Large Boat Builders Are Big Users

Universals are used all over the world. Leading marine motor distributors and dealers sell them. But right here in America, some of our best customers are boat-builders—firms that want a motor in which they can place the same trust as the craft their own hands have created. A few of these are listed here.

"More for Your Motor Dollar"

Now, in 1927, you can own the finest boat power that ever carried the Universal name. Sizes range from 10 to 50 H. P. And in addition to the Direct Drive Motors, the Universal Silent Reduction Gear which is built into both Flexifour and Super-four Motors, is creating a new era in power for cruisers and heavy boats. It offers tremendous advantages in lower first cost, enormous saving in operating cost, saving in space and weight, plus unbelievable smoothness, quietness, greater flexibility, better maneuvering and handling of boats.

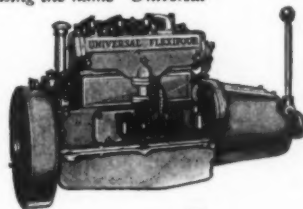
Beautiful new 36 page catalog No. 79 describes the new models in detail and tells the interesting story of Universal's progress. Write today.

UNIVERSAL MOTOR COMPANY, 40 Ceape Street, OSHKOSH, WIS.

Not connected with any other firm using the name "Universal"

Super-four—Three models—GLS 15-30 H. P., GLH 25-45 H. P., GLR 50 H. P., special racing model for 151 class. From 25 to 50% more speed than your motor dollar has ever brought before. As smooth as a "six".

Flexifour—The new 1927 10-15 H. P. Flexifour is lighter, sturdier, with overall length reduced 5 in. More power, more eager throttle response, greater smoothness at all speeds. Leading boat builders now offer standardized craft, Flexifour-equipped for little more than the cost of a low priced car.



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at the
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May 9 to 14.

Universal
10 to 50
Horse Power
MARINE MOTORS

Electric Plants. Industrial Engines. Pumping Units.

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The NEW

AC LONG

LIFE

for

Marine Engines

Now at last a super plug suited to marine use. It comes from AC creative talent, experience and resources—all focused on motor boat maximum requirements.

Heretofore, most plugs would give but limited service, due to the electrodes burning away.

AC Long Life Spark Plugs have been especially designed to remedy this condition in marine service—*here are its special features:*

Recessed Insulator:

Knife edge ring attains sufficient heat to burn away oil deposits thus minimizing carbon troubles.

Extra Large Center Electrode:

Has very long life due to substantial size and improved nature of alloy.

Baffle at Firing End:

Shields insulator and center electrode from full heat of explosion, insuring cool running and greater life to electrodes and insulator.

Extra Large Side Electrodes:

Same substantial diameter and improved alloy as center electrode, insuring permanent width spark gap. Electrically welded to shell, thus giving perfect thermal contact. So shaped as to form a natural drain for oil deposits.



Combined with these features are the basic qualities of excellence which have made AC plugs supreme on land, water and in the air. For greater satisfaction and safety in motor boating, be sure to ask your dealer for the new AC Long Life Plugs.

AC Spark Plug Company, FLINT, Michigan

AC-SPHINX
Birmingham
ENGLAND

Makers of AC Spark Plugs
AC Speedometers
AC Air Cleaners
AC Oil Filters

AC-TITAN
Lavallois-Pontet
FRANCE

All Hands—To Work

(Continued from page 88)

reasonable surface is covered at one time. If too large an area is painted with the remover, it will set firm again before it can be scraped down with the putty knife. In the case of mahogany, after this has all been cleaned thoroughly, it will be necessary to apply a stain to the wood to color it all uniformly. This is done by applying a coat of stain of the proper tone, and then rubbing it into the wood with cotton waste, so that the tint is uniform throughout. Do not allow the stain to dry before the rubbing operation is begun, or you will be faced with the problem of cleaning off the stain also. In the case of oak, it is often necessary to bleach out the black stains which appear. The simplest way to do this, is to make a solution of oxalic acid crystals in alcohol, and then paint this solution on the stained part of the wood. After it has dried out and cleaned itself properly, it may be necessary to go over some obstinate spots before the wood is ready for further work. Some folks like to see their oak in as light a color as possible, and for these the next operation will be a thorough sandpapering followed by from three to four coats of good varnish with sandpapering between all coats. Where a little darker tone is wanted in the woodwork, a stain can be applied in a similar manner to that described for the mahogany.

One important point to remember in all outside painting and varnishing operations is to keep an eye on the weather. Really good varnishing should not be done unless the temperature is from 65 to 70 degrees, and the barometer is high. Varnish work done at lower temperatures will not dry quickly or as well. While paint will set at lower temperatures, the warmer days should always be selected for this work, rather than the colder ones. While paint is generally spoken of as drying the time it takes to harden, this is not quite correct since it is an oxidation of the materials in the paint which gradually harden it. While it is true that the oils evaporate, the body of the paint undergoes a change which takes time to bring about. This cannot be hastened unduly without harming the paints.

Among the final operations before the boat is launched would be the application of the protective bottom paint to the boat's bottom. The composition of practically all bottom paints is such that there are heavy pigments in suspension. If this paint is applied without being very thoroughly stirred, the pigments settle in the bottom of the can, and the oils and colors are applied to the boat, leaving the material in the can, which is intended to do the work of protecting the hull. The only good way to make sure that these paints are thoroughly stirred is to have some of the junior members of the crew stand by while this work is going on, and stir the pot of paint continually.

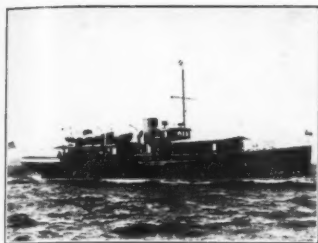
Even this is not sufficient, as they are apt to lose interest in the job after a short time, and not dip the paddle deep enough to do the necessary work. The painter should occasionally dip the paddle well into the bottom of the can, and assure himself that there is no heavy pigment in the bottom. There is some reasonable doubt as to whether boats should be launched with the bottom paints wet or dry. From personal experience we have found that there is apparently no difference in the protective value of paints which can be traced to this one point. We have found that some paints are excellent in some localities, and those same paints are worthless in other locations. The reason for this is probably due to the density or lack of density of pollution in the waters, and experience will show which brands of paint give the best results in each locality. They must all be carefully applied, and manufacturer's instructions closely followed.

While all the painting and cleaning of the big boat has been going on, the dinghies and other accessories should have been painted also. It is much simpler to spend fifteen minutes applying a coat of paint to a row boat at the same time that the big boat has been covered, than to tackle the job separately at a later time, which will mean the cleaning out of brushes again, and the necessary loss of time between the coats while they are drying. It is here that the man who uses his head is able to affect considerable savings of time in the boat's fitting out.

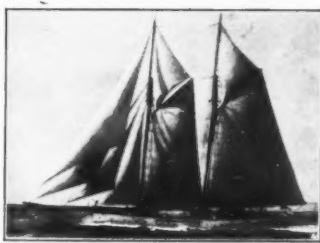
Before the boat is launched it is also advisable to spend an hour or two in going over all of the ground tackle and lines in order to be sure of their condition. Frequently lines are neglected and chafed spots will be found in them, which injures them, so that if there is any unusual strain placed on the line, it will part at a time when a failure will cause the greatest grief. The mooring, anchors, chains, and floats, should also be inspected, so that it will be certain that they will not fail during the summer. New lines should be used on moorings each year, irrespective of the apparent condition of the line, it is excellent insurance to invest in a new line at this critical point. It is false economy to trust an old line which may part in a gale and allow the boat to be dashed on the beach.

No doubt every boat owner has equipped himself with an outboard engine, which may also require a little attention before

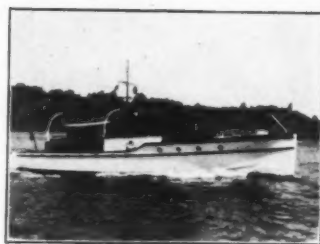
(Continued on page 96)



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Free from Fire's Hazards as LUX stands guard!

FIRE ABOARD! One pull of the control handle — LUX rushes to its work—5 seconds—and the fire is *OUT*.

Not 99 per cent out—but 100 per cent out.

Not out in one corner—but extinguished in every crack, every corner of the vessel.

Lux is a built-in extinguishing system. Carbon Dioxide, the arch enemy of flame, controlled by simple and perfected mechanism, is the extinguishing agent.



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CASPAR

MOTOR OIL

Highly Recommended by Leading Boat Builders and Engine Manufacturers



CASPAR motor oil is used in the Hall-Scott power plant of the world famous Sea Sleds

CASPAR WINS! Late Telegraphic Reports on Biscayne Bay Races

CASPAR OIL WINS FIRST THIRD AND FOURTH PLACE BISCAYNE BABY RACE IN BISCAYNE BAY REGATTA HELD HERE MARCH 18TH AND 19TH IN NUMBERS FIFTEEN SIXTEEN AND TWENTY THREE DRIVEN BY BRADFELD ADAMS AND PEASE ALSO WON SECOND IN RUNABOUT RACE IN BABY GAR DRIVEN BY BERNER REGATTA VERY SUCCESSFUL FOR CASPAR WILL ALSO BE USED HAVANA REGATTA NEXT WEEK.—MIAMI, FLORIDA, MARCH 21.

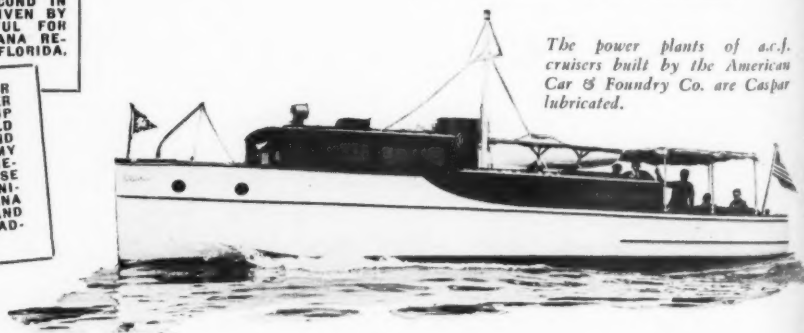
CASPAR OIL WINS AGAIN I USED YOUR OIL IN MY BISCAYNE BABY RACE WON THE GOVERNOR'S CUP FIFTEEN AND WON THE REGATTA HELD AT THE BISCAYNE BAY MARCH 18TH AND AT MIAMI BEACH ON MARCH 18TH AND 19TH THE CONSISTENT RUNNING OF MY SCRIPPS 65 ENGINE I ATTRIBUTE UNILY TO CASPAR OIL AND WANT TO ADVISE THAT OIL PRESSURE WAS ALWAYS UNIFORM WILL USE CASPAR IN THE HAVANA REGATTA ON MARCH 26TH AND 27TH AND ALL FUTURE EVENTS.—GIBSON BRADFIELD.

CASPAR OIL
Has
Three Times
the Life of
Ordinary Oil

BECAUSE CASPAR motor oil is an indestructible blend of castor and mineral oils and provides an absolutely unbreakable film of permanent oiliness it is adopted by such leading marine manufacturers as: The Hall-Scott Motor Car Co., Sea Sled Corp., and the builders of a. c. f. Cruisers.

CASPAR motor oil is a decidedly superior lubricant for marine engines. It produces more power, more speed, quicker acceleration and smoother running by reducing to a minimum friction between all moving parts. CASPAR prevents crank case dilution, saves fuel, cuts the heart out of repair bills and lasts three times longer than ordinary oils.

Let us send you some instructive literature on marine engine lubrication.



The power plants of a.c.f. cruisers built by the American Car & Foundry Co. are Caspar lubricated.

CASPAR OIL CORPORATION

Marine Division

1819 Broadway

New York City

KERMATH

If you want the best

Here is a power plant of extraordinary ability and extraordinary value. Marvelously designed—a perfect marvel to handle. Operated with the ease and assurance of a high powered automobile—and just as smoothly. Responsive to the slightest touch. Get the utmost out of every ounce of gasoline. The Kermath 150 H.P. Six will prove a joy to any boat enthusiast.

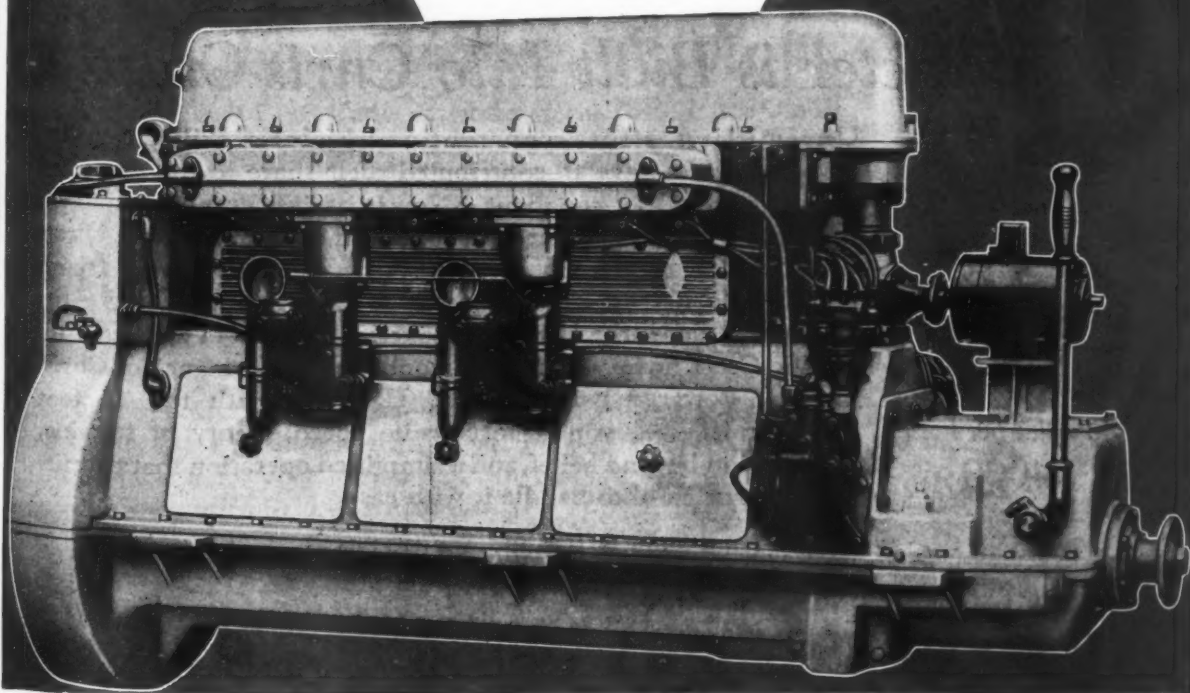
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3 to 150 H.P., \$135 to \$2300

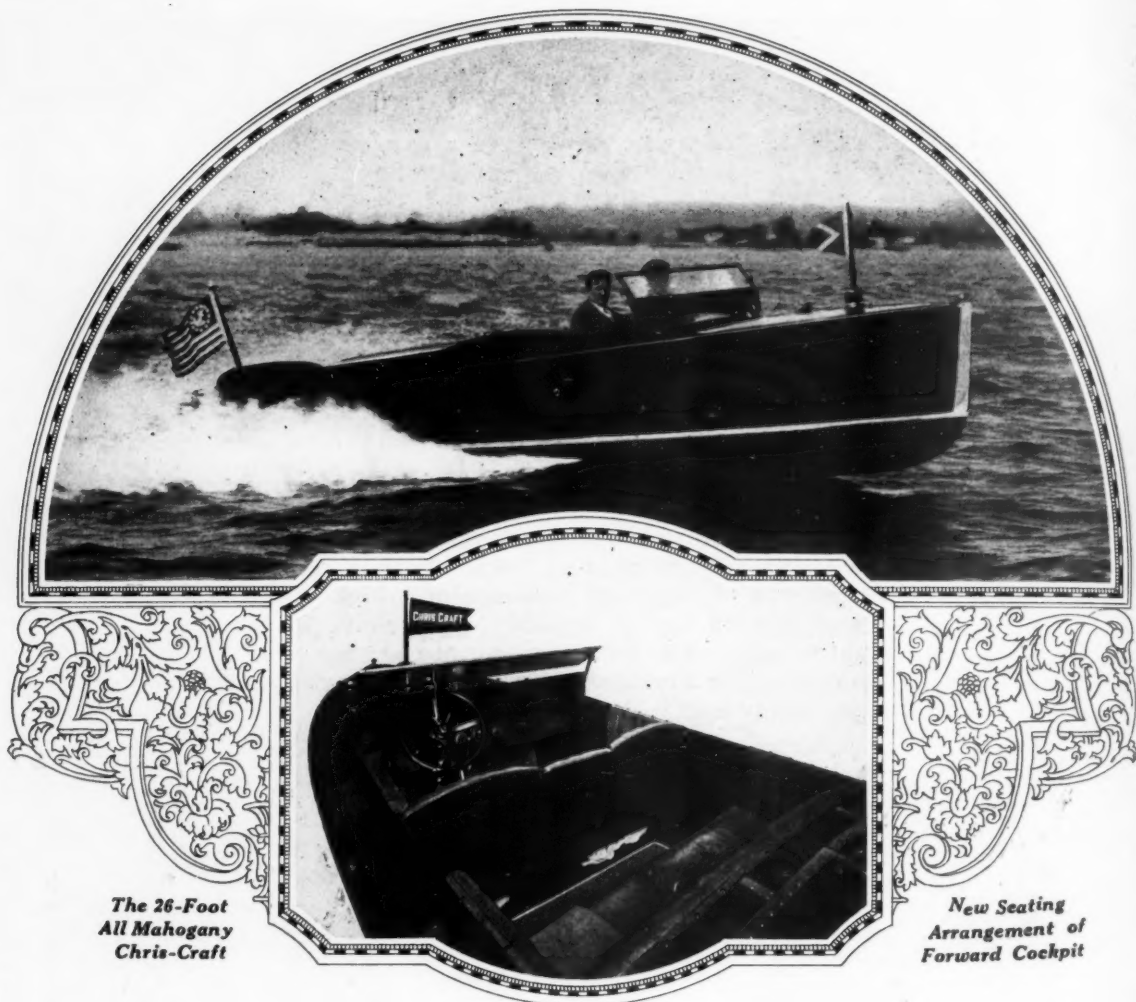
KERMATH MANUFACTURING CO.

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"A Kermath Always Runs"



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*The 26-Foot
All Mahogany
Chris-Craft*

*New Seating
Arrangement of
Forward Cockpit*

Character is Built Into Chris-Craft

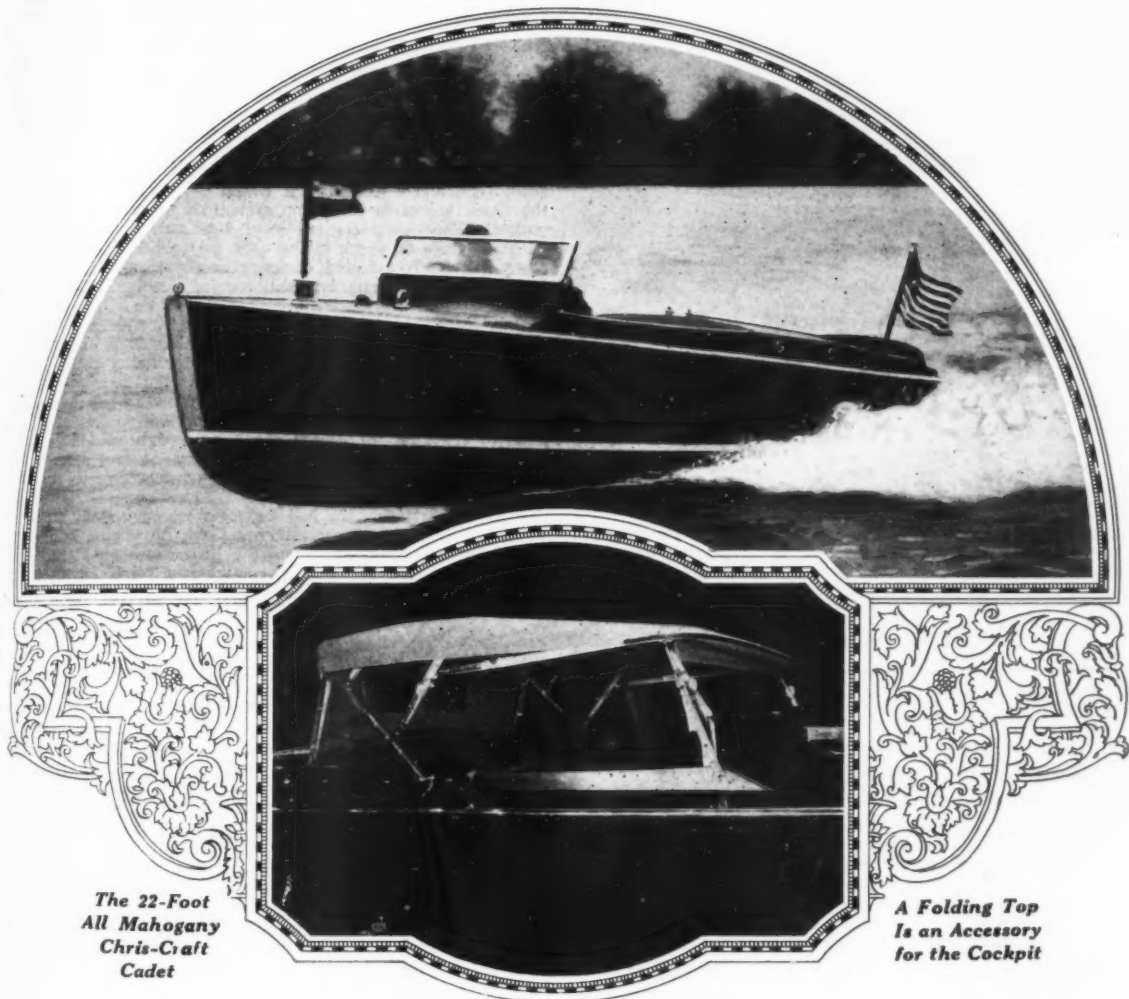
Unremitting effort, constant watchfulness, skill, ingenuity, resourcefulness have all contributed their share to the perfected Chris-Craft 26 foot runabout. Now in its sixth year of production this boat has proven its greatness beyond all expectations. From every section of the country—the Atlantic Coast—Long Island Sound—Florida—the Great Lakes—the Mississippi Valley—the Gulf of Mexico—the Northern Lakes of Minnesota and from the Pacific Coast owners relate the wonderful performance of Chris-Craft. Powered with the 150 H. P. Kermath the 26 foot Chris-Craft gives you a forty mile speed, plenty of stamina, acceleration beyond belief, and a simplified operation that permits a woman or child to handle it with ease.

35 miles per hour
\$3500

40 miles per hour
\$4000

National Sales Office and Showrooms
393 Seventh Avenue - New York City

Chris Smith & Sons Boat Co.
ALGONAC - MICHIGAN



The 22-Foot
All Mahogany
Chris-Craft
Cadet

A Folding Top
Is an Accessory
for the Cockpit

A Runabout Value Without Precedent

The 22 foot Chris-Craft Cadet is moderate in price but a Chris-Craft through and through. Its handsome lines, its unrivaled performance gives it an undisputed leadership in its class size. Here you have the ideal family runabout for smaller bodies of water. It is sturdily built of solid mahogany with double planked bottom, has cockpits forward and aft for eight passengers, is powered to give a speed of either 25 or 35 miles per hour. Compare the Chris-Craft Cadet with any other runabout built. You will discover that, point for point, it is unmatched in value, unrivaled in performance and unequalled for economical first cost or operation. For the careful buyer who wants fine runabout quality in a smaller boat, the Chris-Craft Cadet is the undisputed "buy" in the entire field of runabouts.

25 miles per hour
\$2250

35 miles per hour
\$2550

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Chris Smith & Sons Boat Co.
ALGONAC - MICHIGAN

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W38

A 38 ft. Trunk Cabin Cruiser

Exclusive with
John Wanamaker New York

THIS splendidly proportioned boat has been put through the most exacting tests. It is offered by Wanamaker's as one of to-day's finest examples of the trunk cabin type of cruiser. On extended cruises comfortably accommodates six persons in a spacious saloon and state room.

Outstanding features are livability, roominess, speed, power, seaworthiness, ease of handling, reliability and beauty.

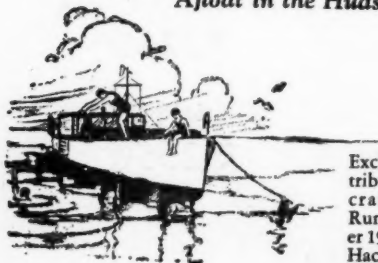
The new Sterling-Petrel six-cylinder, 100 horse power motor, is standard equipment. The Hall-Scott, 100 horse power six-cylinder engine or any other suitable marine motor may be specified at slight variations in price.

Cruising speed with the Sterling or Hall-Scott engine 13 to 15 miles per hour. Cruising radius on one filling of gasoline 300 miles.

Here are sunshine, adventure, health and happiness for yourself and your family. Call, telephone or write for illustrated brochure.

\$9,250

Afloat in the Hudson



Exclusive New York distributors of the Hacker-craft 24 ft. and 28 ft. Runabouts, the Wanamaker 19 ft. Runabout and the Hackercraft 35 ft. Express Cruiser. Write for brochures.

JOHN WANAMAKER NEW YORK
Broadway at Ninth Street Stuyvesant 4700 Ex. 754

All Hands—To Work

(Continued from page 90)

the season's work will be done. There is very little to go wrong on these machines, since they are two cycle engines, and do not require valve grindings, and the other services called for by a four cycle engine. The particular spots to inspect are the breaker points on the ignition device, to see that they are clean and properly adjusted. Spark plugs can be taken out, cleaned, and readjusted, and a minor point which is apt to be overlooked is the check valves in the pump system of the engines which use pumps. The newer engines have done away with pumps, and naturally have no check valves. On the earlier engines however, these will be found, and on inspection are quite certain to be rusted in to their seats, and will require cleaning. Even though the valves and seats are of bronze, a certain amount of rust deposit from the other portions will gather, and cause them to stick. If the engine is started with valves which are closed, it is apt to be damaged before the operator has a chance to observe that no water is flowing through it. It is also well to look to the lubrication of the gears at the lower end of the drive shaft. All engines have provision for inserting grease at this point, and some of the kinds of grease which are recommended as water proof are preferable. Before the engine is started after a several months' rest, it would be well to insert directly into the cylinders and base a quantity of lubricating oil. While the method of lubricating the interiors of these engines by oil introduced in the fuel is generally practiced, an engine which has thoroughly dried out may require a little extra oil at the start. After a short time of running, enough new oil is introduced in the fuel to take care of its needs.

A Mechanical Fuel System

(Continued from page 45)

requirements of the engine, that is, at no time can the pump deliver more fuel than what the engine can consume. Third, by efficiently straining the gasoline and separating the water before it reaches the valves, eliminates the sticking and freezing of the mechanism. It is also claimed that exhaustive tests with the new pump by AC Engineers at the General Motors Proving Grounds, show that the device is capable of delivering fuel from 100 per cent. to 200 per cent. in excess of the maximum requirements of all cars now on the market.

The pump and all its working parts are contained in a die-cast housing and the drive is obtained by any convenient method off the engine which will provide a reciprocal motion of 3-16 to 1-4 inch maximum.

By referring to the illustration it will be easier to explain the exact workings of the unit. The diaphragm *A* is made of specially treated cloth which is unaffected by gasoline or benzene and is held together by two metal discs *B* and is driven upward by a pump spring *C*. In the upward position the diaphragm almost fills the pump chamber *M* so that when it moves downward a high vacuum is created which assures the pump working even at low speeds. It is claimed that the $\frac{1}{4}$ in. movement of the diaphragm is possible indefinitely without any injury, because of the extreme flexibility of the material. The extreme movement of the diaphragm takes place only when the carburetor is empty. When the carburetor is filled, the movement is greatly diminished, being directly proportional to the amount of gasoline used by the engine. Under most ordinary driving conditions, this means that the diaphragm is pulsating in a movement of about .003 inch maximum. The linkage *F* controls this movement for when the diaphragm is in the depressed position, due to sufficient fuel in the carburetor, the reciprocal movement of the lever *D* will merely cause a movement of the linkage *F* to the right as shown by the arrow.

The complete cycle in the operation of the pump is described as follows: By revolving shaft *G* the eccentric *H* will lift rocker arm *D* which is pivoted at *E* and which pulls linkage *F* together with diaphragm *A* held between metal discs *B* downward against spring pressure *C* thus creating a vacuum in pump chamber *M*. Fuel from the tank will enter at *J* through strainer *K* and suction valve *L* into pump chamber *M*. On the return stroke, spring pressure *C* pushes diaphragm *A* upward forcing fuel from chamber *M* through pressure valve *N* and opening *O* into the carburetor.

When the carburetor bowl is filled, the float in the float chamber will shut off the inlet needle valve, thus creating a pressure in pump-chamber *M*. This pressure will force the diaphragm *A* downward against spring pressure *C* where it will remain in the downward position until the carburetor requires more fuel and the needle valve opens.

Spring *P* is merely for the purpose of keeping operating lever *D* in contact with eccentric *H* to eliminate noise.

Woolsey's

MARINE PAINTS and VARNISHES

Quality Products
Since 1853

"Lawley Built"

GEORGE LAWLEY & SON CORP.
BUILDERS OF
YACHTS AND MOTOR BOATS
IN STEEL, WOOD OR COMPOSITE
BOSTON, MASSACHUSETTS

OFFICE OF
THE SUPERINTENDENT
November 11, 1926.

G. A. Woolsey Paint & Color Co.,
Grand, Marceles & Golden Streets,
Jersey City, N. J.

Gentlemen:

During the past few years, it has been a pleasure for us to use your products on a number of our boats, and they have proven a very great success.

Many of the yacht owners with whom we are doing business have at various times specified your products, especially your buff deck paint and green bottom paint. The fact that these products are specified so frequently, naturally, proves their value.

As you are aware, this Corporation uses a great many thousand pounds of white lead putty during the course of the year, and all of this product used by us is purchased from your concern, as in all our years in yacht construction and repairs, we have found none to equal it.

Trusting that we may have the pleasure of doing a greater volume of business with you in the future, we are

Yours very truly,
GEORGE LAWLEY & SON CORPORATION,
W. J. Kennedy
Treasurer.

WJL/R



Trade Mark



YACHT WHITE
Unbeatable for Whiteness and Wearing Qualities. Will not crack, blister or peel. Leaves an ideal surface for repainting.

TUNGSPAR VARNISH
TUNGSPAR is Waterproof—Will Not Turn White. High Lustre—Elastic—Durable. A Particular Varnish—For Particular People

COPPER BEST PAINT
Gives the smoothest sailing bottom. With absolute protection against fouling by seaweed, barnacles or boring teredo worm.

C. A. WOOLSEY PAINT & COLOR CO.
JERSEY CITY, NEW JERSEY, U. S. A.

Paints & Varnishes

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

Banish Fire Hazards with the CO₂ System



When your boat is equipped with CO₂ fire extinguisher you can dismiss the thought of fire from your mind forever.

In less than 30 seconds of time CO₂ will totally extinguish any blaze in any part of your boat. And it will perform this feat automatically in a never-failing manner—whether you are aboard, asleep or miles away from its mooring.

CO₂ instantly smothers fire with a non-destructive inert gas. In no way will soil or injure the most delicate fabric.

CO₂ is ideal fire protection.

Write, phone or call in person for complete information.

New York Representative
S. CLYDE KYLE

217 West 57th Street

Telephone: Circle 9469

THE CO₂ FIRE EQUIPMENT CO.
 300 Fay Building Los Angeles, Cal.

Apple Sauce a Speedster

(Continued from page 55)

will be better with the paint finish. The choice here can be left to the builder, and a color scheme worked out to suit the individual fancy. The bottom portion of the boat should be painted followed by several coats of varnish, each one smoothed down with fine sandpaper. The final coat of varnish will have powdered graphite sifted onto it, which can then be rubbed in and thoroughly polished, after which it can be allowed to dry.

The canvas deck is tacked along the outside of the sheer plank, and the tacks can be covered with the half round rub strip, which is secured over them. The canvas cover is provided with a wide seam around the cockpit opening, which is provided with a draw string which will stretch the canvas tightly forming a sort of a deck around the cockpit, which however, cannot be stepped on. The height of the transom as called for on the drawings is correct for the present 4 h.p. outboard engines. If cavitation is encountered, this height can be cut down somewhat, permitting the propeller to operate a little deeper in the water.

SPECIFICATIONS

Plank: Side sheer, cedar, dressed $\frac{3}{4}$ inch thick, $5\frac{1}{2}$ inches wide, $9\frac{1}{2}$ feet long, two required.

Plank: Side chine, cedar, dressed $\frac{3}{4}$ inches thick, $8\frac{1}{2}$ inches wide, $9\frac{1}{2}$ feet long, 2 required.

Plank: Bottom keel, and bottom chine, cedar, dressed $\frac{3}{4}$ inch thick; 11 inches wide, $10\frac{1}{2}$ feet long, 4 required.

Transom: Cedar or cypress, see details.

Ribs: Poplar, cypress or spruce, see details.

Keel: Batten and chine, cypress, or spruce, see detail.

Plank Battens: Cedar $\frac{3}{4}$ inch thick, $1\frac{1}{2}$ inches wide, 10 feet long, 4 required.

Ribband: Cedar $\frac{3}{4}$ inch thick, $1\frac{1}{4}$ inches wide, $9\frac{1}{2}$ feet long, 2 required.

Rub Strip Spruce, $\frac{3}{4}$ inch, half round $11\frac{1}{2}$ feet long, 2 required.

Keel: Cedar, see details.

Knees: Cypress, see details.

Deck Beams: Cedar, see details.

Transom Brace: Iron or brass, $\frac{3}{4}$ inch light gage tubing, $3\frac{1}{2}$ feet long, 2 required.

Deck: Light weight canvas, with $\frac{3}{4}$ inch draw string around cockpit.

Bow Piece: Cypress, $\frac{1}{2}$ inch thick, $4\frac{1}{2}$ inches, 27 inches long, 2 required.

Flooring: Cedar, $\frac{1}{2}$ inch thick, 6 inches wide, 6 feet long, 2 required.

Fastenings: Bottom planking, number 6, $\frac{3}{4}$ inch flat head brass screws.

Side planking number 6, $\frac{5}{8}$ inch flat head brass screws.

Chine and keel batten to ribs, number 8, $1\frac{1}{4}$ inch flat head brass screws.

Battens and ribband to ribs, number 6, $\frac{5}{8}$ inch flat head brass screws.

Keel to hull: number 8 $1\frac{1}{2}$ inch flat head brass screws.

Planking to battens: copper nails, clinched on inside.

A Girder Type Gangway

(Continued from page 54)

a gangway. Two husky eye-bolts, or eye-plates similar to those fitted to the gangway, should be attached to the dock and a length of machine shafting $1\frac{1}{4}$ inch diameter, run through the four eyes. This will form a hinge-pin, also a means for quickly retaching the gangway in the fall. A $\frac{1}{4}$ inch cotter-pin in each end of the shafting will prevent it slipping.

A. N., Brooklyn, N. Y.

A Removable Runway

THE runway shown is easily put in place in the Spring or removed at the end of the season, by removing the four bolts that fasten it at its shore and float end. Of course any runway that is very long or wide is not readily portable, and therefore in the following description the suggestions will apply only to runways that can be lifted by two men. The iron parts described in the following might seem to be needlessly large, but it should be remembered that rust, especially when aided by salt water, soon reduces the size of and greatly weakens such parts all too soon when they are exposed, as they will be, even though paint is applied occasionally.

The two wooden side members, (a), Fig. 4, should be two

(Continued on page 100)



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The element of safety, the pride of victory over time and tides have for years made veteran boat owners specify Bosch Marine Equipment.

Bosch precision and Bosch dependability have been tested under every circumstance, on every sea. The famous Bosch Magnetos stand supreme as the life-giving unit of marine engines—and they are always the same high standard of excellence that is characteristic of all American Bosch Magneto Corporation products.

In giving your overhauling instructions or when releasing building specifications it will pay you to specify "Bosch Marine Equipment."



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Bosch RED Spark Plugs famous for their wrench-tight-proof and carbon resisting Ambozite insulator — non-burning electrodes and gas tight design.

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Bosch Electric Horns have a low, penetrating tone that travels far over the water and promotes safety and confidence. When purchasing look for the American Bosch trade-mark.

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Here is the ideal chair for use "aboard." Comfortable, sturdy and "sporty" in appearance, the "Gold Medal" No. 35 Y yacht chair illustrated above is everything that a yacht chair should be. Folds compactly for stowage; is extremely durable under all condition.

Salt water cannot corrode its brass hardware or effect the tough khaki canvas covers, and rich varnished mahogany finish which looks so well on deck or bridge.

A new added feature is the rubber cushioned feet pictured above. These "Gold Medal" Chairs cannot scratch or mar the finest finished decks or floors.

"GOLD MEDAL"

TRADE MARK REG. U.S. PAT. OFF.

FOLDING FURNITURE

This comfortable chair is equally well adapted to indoor use, too, as its wide-spread use at yacht, golf and country clubs, summer homes and cottages thoroughly indicates. Weighs 14 lbs. Folds 8"x16 1/4"x25".

The No. 35 Y chair can be secured in a wide variety of finishes—plain varnish, two toned lacquer (Chinese red, Jade green, French blue). Fancy colored covers are also standard equipment when ordered.

Write for the new "Gold Medal" catalog which describes the full line of folding furniture for yacht, club, home or camp use.

Gold Medal Camp Furniture Mfg. Co.
 1754 Packard Avenue Racine, Wis.



No. 1 Cot Frame of selected hardwood, cover of extra quality 12 oz. (34-inch), double filled, special woven, brown duck. Open 6 ft. 6 in. long; 27 in. wide; 16 1/4 in. high. Weight only 17 lbs. Folds to 8 ft. 6 in. long by 4 in. by 6 in.

A Removable Runway

(Continued from page 98)

by six inch beams. If the runway is much over twelve feet long it might be necessary to use the truss arrangement shown in Fig. 1 to prevent disagreeable swaying. The truss arrangement if used should consist of not less than 1/2 inch eye and eye turnbuckles (4 required), and 3/8-inch wire rope, fastened to galvanized eyes 7 1/2 inches long extending through the two by six side beams and the flooring, and fastened with a washer and nut, at each end of the beams. A galvanized iron strut or a wooden strut with two eyes similar to the above, fastened to its one end is placed in the middle of the runway side beams. The wire rope must be securely fastened to the eyes and turnbuckles by the use of wire rope clips. The use of makeshift methods of fastening the wire rope will only result in failure of the truss to have the desired stiffening effect.

In Fig. 1, a single rope is used for a railing, and while this is sufficient for grownups it might be advisable, for the protection of any child who might use the runway, to provide additional ropes as shown in Fig. 4. These two added ropes may be fastened in a number of ways, of which, knotting the ends after being passed through the holes in the uprights is perhaps the simplest. Use only new cotton rope, manila is too splintery.

The shackle arrangement connecting the float to the runway, and the run to the shore is shown in its main details in Fig's 1, 2, and 3. In making or having made the eight plates shown in Fig. 2, they should be drilled in pairs so that there will be no difficulty in bolting each pair to the two by six inch beams. Before being attached, they should be coated with rust resisting paint, and the wood surface that they cover should also be painted.

The pattern for the casting shown in Fig. 3, can easily be made by anyone who is at all handy with tools. Any iron foundry will give you a few tips on the construction, if you give them the work of casting.

The 1 1/2 inch hole shown through the casting is purposely intended to be 1/4 inches larger than the bolt that passes through it to allow for considerable play. The distance between the side plates on each beam as shown in Fig. 1, should also be sufficient to allow looseness between them and the casting. More will be said of this later. Four 1 inch bolts long enough to extend through the shackle assembly should be provided. The thread on these bolts should only be long enough to receive a nut so that the bearing surface will be unbroken. These bolts should be kept coated with heavy graphite grease.

The drawing, Fig. 1, shows the shore end of the runway attached to a sea wall, but the arrangement of shackles can be attached to a pier or dock, or even to a large boulder with equal facility. Care should be taken however, that the center line passing through the 1 1/2 inch hole in the castings is practically level. This is important. In fastening the castings, shown in Fig. 3, to stone or concrete, holes should be drilled, slightly enlarged near the bottom, the galvanized bolts inserted to the required depth, molten lead poured in to fill the hole, and afterward tamped, to secure a tight fit. When pouring the lead, be sure the holes are dry, otherwise steam will be generated, and the lead will be expelled from the hole with disastrous effects on whoever is in its path. It is best to pour the lead in a not too hurried manner on one side of the bolt so that no air pockets are formed.

In Fig. 1, the runway is shown attached to the shore side of the float. While this arrangement will necessitate extra buoyancy under this point of junction, it is far more desirable with this type of runway than to attach the end of the run to the center of the float to secure equilibrium. It may be mentioned here that the castings should not be merely bolted to the flooring of the float but should have the added strength of a beam or beams strongly fastened to the underside of the float deck. Be sure to use galvanized bolts turned up on washers to secure these castings, lag screws won't do.

The construction of the float retaining device is illustrated in Fig. 5, and consists merely of upright posts driven down into the bottom in such a position as to prevent the sidewise movement of the float when properly braced by the side members and wire cable tension arrangement. The movement of the float in the opposite direction must not be hindered. The shore ends of the horizontal beams A must be rigidly fastened and the level of the beams be such that the wire ropes do not interfere with the runway assuming a normal position at low tide. The location of the eyes B should be at least six inches nearer the shore than the shore side of the float at low tide. The uprights C should be near enough together to prevent either the shore end or the sea end of the float from passing either upright, at high or low tide.

A. M. G., Westbrook, Conn.

Baby Gar Again Wins Bradley Trophy

Open Championship for Displacement Runabouts

"MISS PALM BEACH," a standard Baby Gar runabout owned by W. J. Conners and now in its fourth season of service, again won the celebrated Bradley Gold Challenge Cup at the Palm Beach Regatta on Washington's Birthday. This \$10,000 trophy ranks in value and importance with the Gold Cup and Fisher-Allison Trophies, as it typifies the world's championship for displacement runabouts, regardless of size, power or build, whether stock model or specially designed racer.



W. J. Conners is one of the oldest and best known sportsmen who ever handled a fast boat. Starting with his Courier I in 1905, he has won over forty trophies with his many speed boats, including his record breaking steam yacht, and at 71 years of age still finds comfort and exhilaration at the wheel of his Baby Gar.

Incidentally a standard Baby Gar has won every race ever held for the Bradley Trophy. Former winners include Baby Gar "Mary" owned by Col. E. H. R. Green and "Little Old Man" owned by Rodman Wanamaker II. This trophy was donated by Mr. E. R. Bradley of Bradley's Casino, Palm Beach.

Baby Gar, the Highest Class Runabout in the World, Is Also the Most Efficient in Speed, Seaworthiness and Durability

400 H.P.—50 miles per hour, \$9800
500 H.P.—55 miles per hour, \$11800

*Come in today and see one of these famous boats
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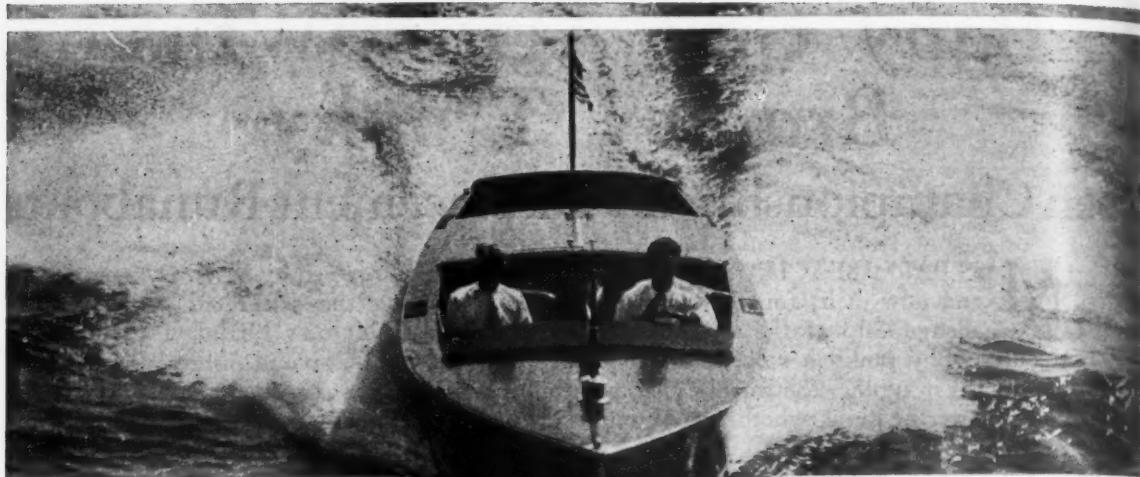
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1. Notice the beamy stability of Baby Gar Jr. That means comfort, safety and easy handling. The beam is actually four to eight inches wider than other boats of the same size and type.
2. The full wide bow insures bouyancy to keep the bow up on top of any sea that rolls, whether it's coming head on, abeam or in a following sea.
3. The graceful flare forward is not only for appearance, but throws the spray away from the boat, as well as increasing buoyancy when driving into a head sea.
4. At approximately 30 miles an hour the V-bottom bow is barely lifted from the water, still the boat is planing in the sense that it is riding

on top of the water. At 40 miles the bow is lifted a little more, but the boat still rides practically flat.

5. The cut-water and rub strip of solid monel metal protect the hull from damage by rubbing against docks, floats and other boats.
6. The driver cannot be uncomfortably crowded by other passengers, because of the divided front seats.
7. The spray thrown aside amidships is not high enough to be blown back into the boat.
8. The wake astern is remarkably smooth, showing how little disturbance is caused by the boat passing through the water.

Here are two unusual pictures of Baby Gar Jr., snapped at Palm Beach in February. Study these unretouched photographs closely if you want to know and understand some of the important characteristics of these remarkable runabouts. Compare these points with your own knowledge of boat performance and look for the same qualities in any other boat.

1. The bow wave breaks into spray slightly astern of amidships, showing how freely the boat is planing.
2. The small amount of spray is thrown clear at the sides. You can see there is no spray against the sides of the boat.
3. The water comes away straight at the stern, proving that the entire hull is planing on the surface of the water. While technically a displacement type of hull instead of a hydroplane, it rides on the surface by planing like a hydroplane or an airplane.

4. The white line is the load waterline at rest. This is several inches above the water surface at speed.
5. There is no stern wave behind the boat and no swirls at the corners. A boat that glides over the water as easily as this, is turning every ounce of power into effective speed.
6. Notice the graceful tumble-home at the stern.
7. Both the forward and after cockpits are big and roomy with a wide transom seat across the back of each, and room for extra chairs in the after cockpit.





Gar Wood Leads Another Trump Baby Gar Jr. Sedan

(Patents Applied for)

CLOSE on the heels of his Baby Gar Jr. introduction, Gar Wood follows with an entirely new type of fast runabout—Baby Gar Jr. Sedan. Here is an all-weather, all-purpose runabout that exceeds any open boat in comfort, usefulness and all around utility value. It meets a demand that has never before been filled.

From January to December you can get more hours of pleasure and more miles of service out of Baby Gar Jr. Sedan than from any other type of boat, because it combines cruiser protection with runabout speed and flexibility. Unequalled as a yacht tender, fast ferry, or wherever you need dependable fast transportation on the water regardless of weather. The sedan cabin can be completely removed in a few minutes for racing.

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No matter which of the several Gar Wood types you prefer, you will find they lead all boats of their class in quality and efficiency. Many of the features now standard for all boats of this class were originated and developed by Gar Wood during his long racing career.

A Gar Wood boat is the safest buy because it is backed by the greatest resources of capital, boat experience and manufacturing ability. Standardized production in quantity insures the utmost in quality and value at the lowest cost. We hope you will verify this statement by actual investigation.

26-ft. Baby Gar Jr.	Sedan
30-32 miles per hour, \$3500	\$4100
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Baby Gar-28
45 miles per hour
\$6000

33-ft. Baby Gar
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This is the latest addition to the roll of fine standardized boats regularly powered with SCRIPPS motors. Runabouts and cruisers of many sizes and types, produced by the most successful boat builders in the country, have Scripps Motors specified by the builders for standard power equipment because they know they can protect their reputations best by giving their customers the most reliable and trouble-proof power plants.

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SCRIPPS is a quality motor for quality boats. And a reasonably priced motor; larger demand and ample financial resources permit quantity production with the best methods known in the art of motor manufacture.

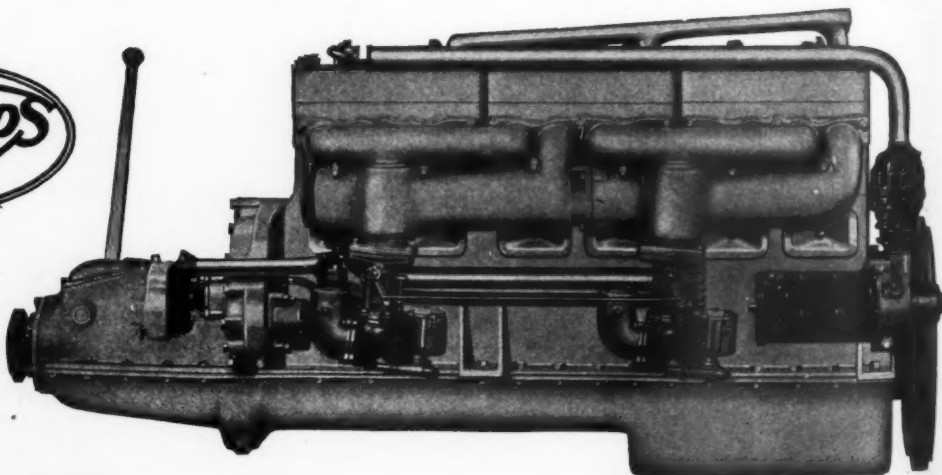
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Scripps Motor Company, 5819 Lincoln Ave., Detroit, Mich.



**Model G-6
150 H.P.
\$2,000.**

**Including Electric
Starter**





The Opinion of an Automotive Engineer

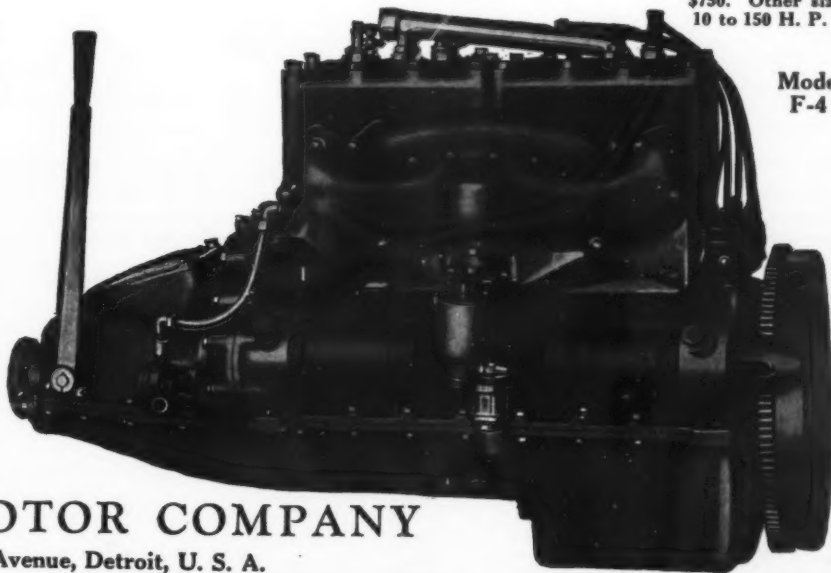
IN his letter, Mr. Rhinelanders speaks not only as a Scripps user and boating enthusiast, but also as an automotive engineer, and his expressions are therefore doubly important.

Highly significant is the fact that the solicitude of the builders to use only the finest of everything lead to the selection of the Scripps motor. The performance of the Scripps as described by Mr. Rhinelanders justifies the confidence in which Scripps is held by discerning men who know motors.



SCRIPPS MOTOR COMPANY

5817 Lincoln Avenue, Detroit, U. S. A.



Model
F-4

F-4, 15-40 H. P.
Medium Duty, 40-
60 H. P. High
Speed, Including
Electric Starter,
\$750. Other sizes,
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AUTOMOTIVE ENGINEER
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TELEPHONE G27-8 BROAD

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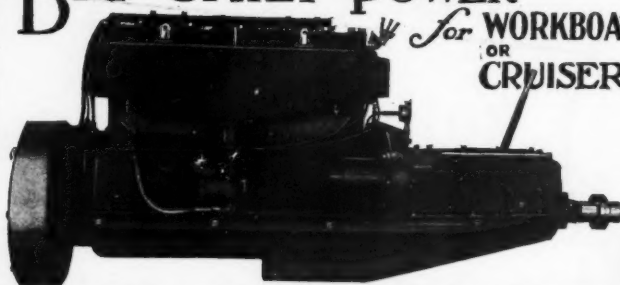
Very truly yours,

Philip Rhinelanders
Dec 14/26.



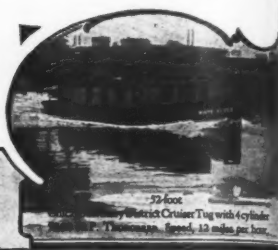
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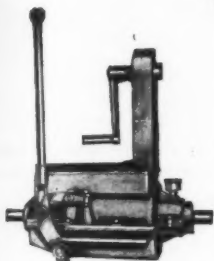
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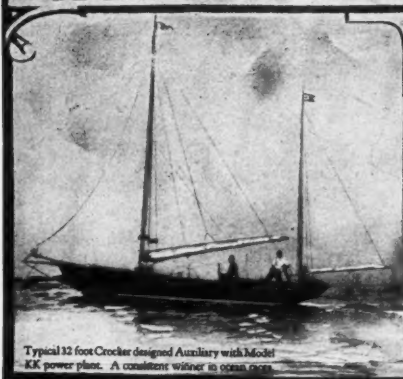
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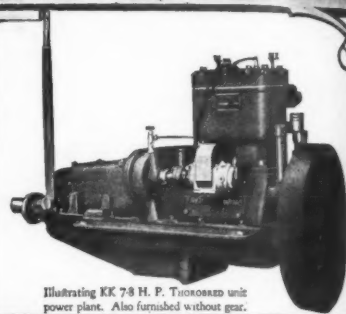
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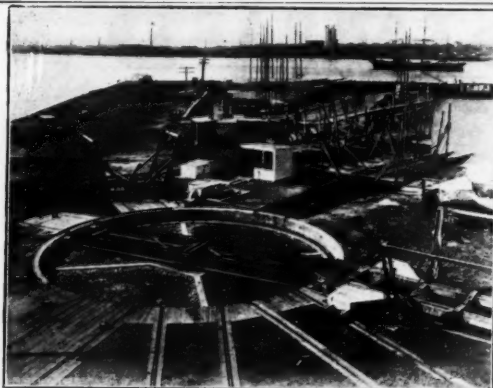
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Price complete ready to go \$1,350. F.O.B. factory.
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RICHARDSON CRUISABOUT

The Smartest Cruiser of Its Size

THIS nationally famous boat has created a new standard of boat values. Never before could you buy equal style, quality, class, appointments and speed in a cruiser at the price of the Richardson Cruisabout.

Sparkling in appearance! Snappy in action! Complete in accommodations and cruising comforts, this twenty-six foot thoroughbred cruiser will immediately captivate you. It is a real family boat, safe and seaworthy,—one in which you can trust the

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With the Richardson Cruisabout you will be at home with the finest in the fleet. You can roam near and far, and live aboard at all times. Power is furnished by the reliable Gray Six-40, giving a speed of eleven actual miles per hour. Better write today if you want to enjoy owning a Cruisabout this summer.

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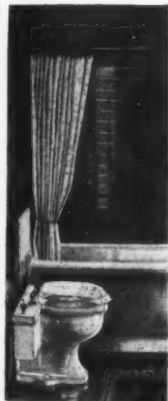
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Lee Marine Electric Closets are used by leading yacht designers and builders. No cruiser should be without one. 32 and 110 volts.

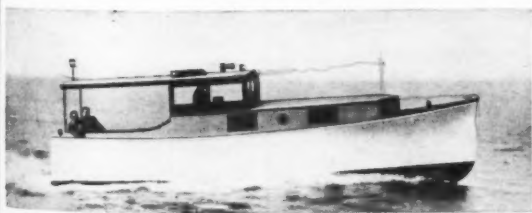
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Rochester 30-Foot Cruiser Price \$2,950.00



Other cruisers 33, 36, 40, 45, 50, 55 and 62 feet. Write for complete data on above or any of our larger sizes.

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Steel Case
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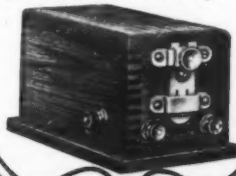


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Waterproofed coils; watertight cases—also non-arcing contacts; trouble-proof vibrators; non-sticking points on the vibrator coils—such features as these make Jefferson's the most reliable marine coils. Make and Break, Box-type and Edison-type. Distributed through leading marine, hardware and electrical jobbers and dealers. Send for literature.

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Largest Manufacturers of Small Transformers
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We also make the National Spark Coils



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The splendid new Mathews "28" cruiser. Rivaling the famous Mathews "28" in cost, performance and equipment. Built by Mathews Co., Port Clinton, Ohio, and offered with Red Wing Model F as regular equipment.

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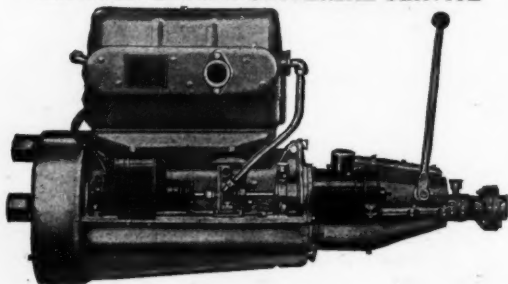
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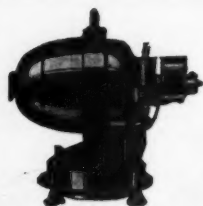


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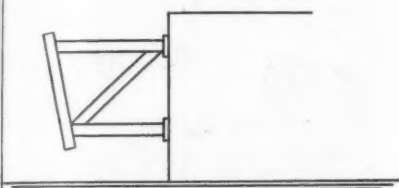
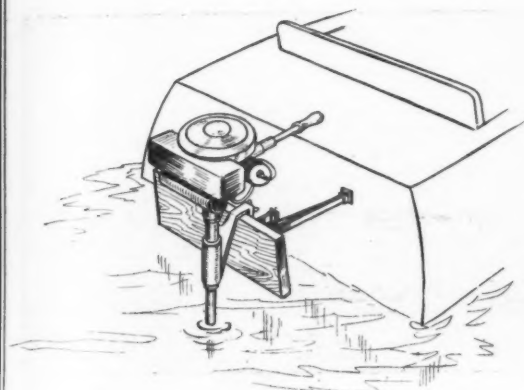
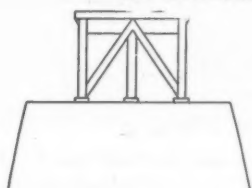
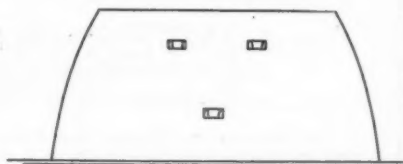
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Without Batteries!

JACK-O-LITE makes its own electricity by means of a sturdy, spring-driven generator. Just wind it and turn the switch. Use it often or seldom, for seconds or hours—its power won't weaken from use or disuse, because it has no batteries to "run down." Built to last for years.

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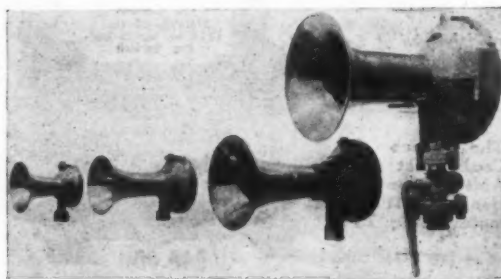
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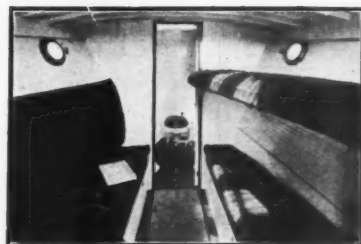
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A demonstration will place you under no obligation; take one soon. Immediate delivery if your order is given now. Price complete with 6 cyl. Continental Van Blerck Engine, \$4700.

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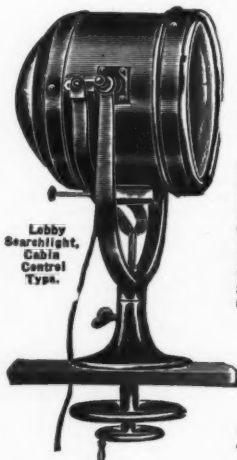
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Made in five sizes, 6-12-25-32 and 110 voltage, and finished in four types, polished brass, battleship gray, nickel-plated and black nickel.

We also manufacture a complete line of running lights and cabin fixtures. Let us know your requirements.

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Wherever Boats Are Used REGAL MARINE ENGINES

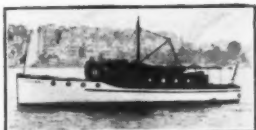
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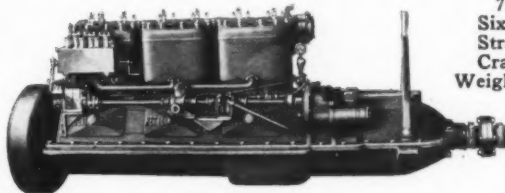


Cruiser Lillian, Seattle, Washington, Winner Pacific Motor Boat Long Distance Cup Race, powered with "LC" Regal

EIGHTEEN MODELS
For All Types of Motor Craft
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Regal Marine Engines have proved themselves in service for 26 years

Operate on Gasoline, Kerosene or any Water-White Fuel.



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Ideal $\frac{3}{4}$ K. W., air-cooled electric lighting plant for boats

The Latest REGAL
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75 H.P. at 800 R.P.M.
Six Cylinders, Bore $5\frac{1}{2}$ "
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Weight, 2700 lbs. Price, \$2500

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Marine Engines Built by "Gar" Wood

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These record-breaking engines are available for your speed boat or cruiser.

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OUTBOARD MOTORS

The Motor Boat Show proved once more the need for careful selection of an Outboard Motor Boat.

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Lowest prices consistent with Tiebout Standards.

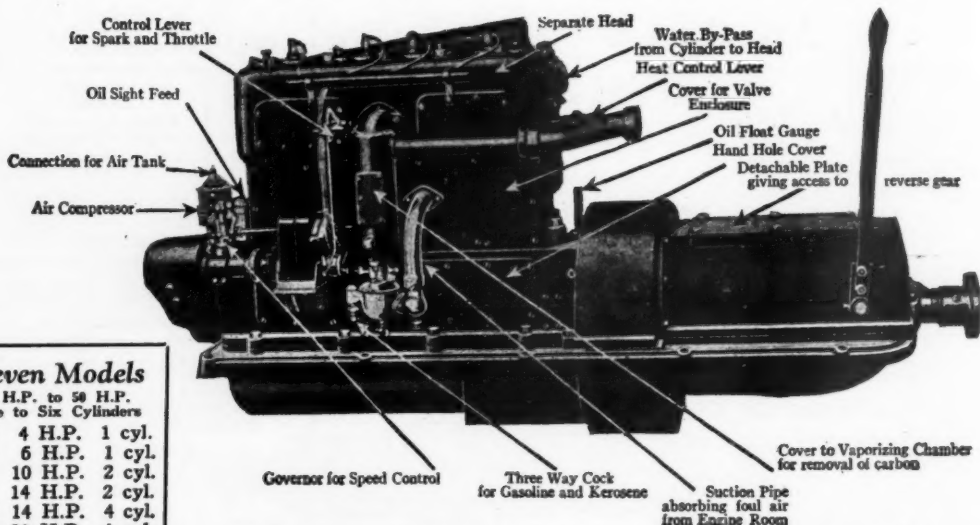
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118 Chambers St. New York

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Famous for Long and Faithful Service



Eleven Models

4 H.P. to 50 H.P.
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F-1	4 H.P.	1 cyl.
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F-2	10 H.P.	2 cyl.
I-2	14 H.P.	2 cyl.
D-4	14 H.P.	4 cyl.
E-4	20 H.P.	4 cyl.
E-6	35 H.P.	6 cyl.
F-4	22 H.P.	4 cyl.
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MILLER marine motors are famous for their unfailing performance. It is features like the above plus careful workmanship and high quality of materials that keep Miller motors unusually free of repairs and maintenance troubles common to some marine power plants. If you want an engine for your boat that will serve you long and faithfully at a minimum cost you will find a Miller to do the job. Write today for complete catalog.

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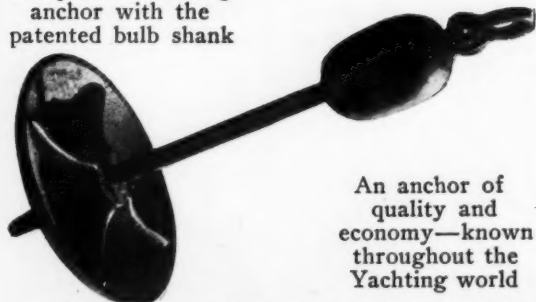
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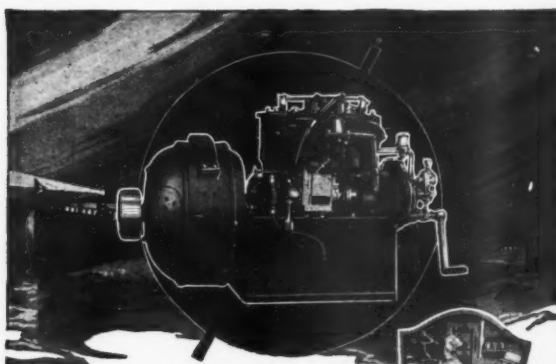
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Carried in New York stock from 50 lbs. to 1250
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City Electric Service for Your Cruiser

UNIVERSAL Marine Electric Plants are truly marine type, atow in tight quarters, are very accessible and with four-cylinder power silently deliver smooth, flickerless light. Sizes 1½ K.W. to 12½ K.W. in 32, 60, 110, 220 volts.

Typical installations include the "Wasp", Wm. Weigley, Jr., Chicago; "Edris", Thomas H. Ince, Culver City, Cal.; "Cigarette", Gordon Hammersley, New York City; and "Samona", W. J. Hole, Los Angeles.

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Four
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Marine Motors. Industrial Engines. Pumping Units

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LifeHard
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Two Beautiful and Luminous Colors—Emerald and Light Green

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INTERNATIONAL—16

A Sturdy Engine for Runabouts,
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THE International—16 is built from the ground up for marine service. Four cylinders, four cycle. Bore 3¼ in.; stroke 4 in. Develops 10 H.P. at 500 R.P.M. and 18 H.P. at 1200 R.P.M. You can depend upon the International for steady and economical service through many years. It runs smoothly, quietly, powerfully and free from vibrations. It is easy to start and easy to control because it is so flexible. And the price is within reach of any one's pocket.

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AT \$75.00 ADDITIONAL
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the World
on BOATS

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BOATS**

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The best that skill and experience can produce—at real money-saving prices. Prompt shipment from factory to you.

OUTBOARD SPEED BOATS

Fastest of all Boats for Outboard Motors, including Step-Plane, Baby Buzz and Zip-Plane.

Prices, \$48.00 and up.

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Ride the waters like a swan. Safe even in rough waters. Fine for family use.

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Square Stern Rowboats—Made both smooth sides and lap strake construction. Steady, seaworthy and easy to row.

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Complete with engine, 16 to 26 ft. long. For Lakes, Rivers, Shallow Water and Weeds.

Prices, \$263.00 and up.

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Please state the kind of boat you are interested in

← **TWO LARGE FACTORIES** →

Thompson Bros. Boat Mfg. Co.

212 Ann Street
PESHTIGO
WISCONSIN

(Write to
Either Place)

112 Elm Street
CORTLAND
NEW YORK

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MODEL D
10-14 H. P.
Light in weight,
compact, rugged
and durable.

AN IDEAL RUNABOUT MOTOR MODEL D-10-14 H.P.



Red Wing Chevrolet
THE MOTOR WITH POWER TO SPARE.

Its velvety smoothness
and power will
delight you.

Equally successful in the
tender fishing boat
or auxiliary.

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**12 THOROBRED
SIZES, 7 TO 150 H.P.**

2 Cylinder Model
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AA 18-24 H. P. 33 1/4
F 28-36 H. P. 41 1/2
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BB4 HS 45-70 H. P. 41 1/2
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**RED WING MOTOR CO. RED WING
MINNAPOLIS**

A TRIMOUNT ROTARY PUMP

FOR EVERY PUMPING REQUIREMENT—NO PRIMING NECESSARY



Motor Driven Bilge Outfit, Shown on Left, Made in Three Sizes, 3/4" 1" and 1 1/4"—Capacity 6-10-20 Gallons Per Minute.

Hand pump shown below made in four sizes—6 to 20 gallons per minute.

Power pumps, capacity up to 85 gallons per minute (1 1/2" to 2 1/2" pipe size).

For pulley or gear drive.



Write for further particulars

TRIMOUNT ROTARY POWER CO.

294 WHITING AVE. EAST DEDHAM, MASS.

Manufacturers of Hand and Power Pumps and Whistle Blower Outfits

Taking Checks Out of Canvas

(Continued from page 51)

not gum up with the powdered paint. This is not intended to save sandpaper alone, but to enhance the cutting qualities of the sandpaper, since sandpaper loses its abrasive ability when rubbed over a dusty surface.

The success of the repainting job depends upon how smooth the old painted surface is made. All the checking need not be removed. Two coats of thick paint, with a light sanding between, will fill up check marks that have little appreciable depth.

In applying this paint, stroke the brush in one direction only and when possible, at right angles to the longest and deepest check lines. If the paint used is exceptionally thick, say paint that has thickened through exposure to the air rather than in being mixed thick, it will be best to level it off with a cabinet scraper. In cases where the paint has lifted completely, leaving bare areas of wood or canvas, it will be well to use white lead putty instead of thick paint. This putty is made of dry white lead, turps, dryer, and a little of the deck paint that will later be used, just enough to give the under coat tint that is needed.

This putty is used by automobile refinishers in filling in dents in fenders and bodies, and although it contains turpentine it will have little ill effects on marine paint when properly covered with same. The compound hardens quickly and admits of easy sanding to a smooth surface.

J. E. M., Norwich, Conn.

Duplex Distributors Grow

Illustrating the very remarkable strides being made by Duplex Marine Engine Oil, announcement has just been made of the appointment of the Marine Construction Company, Wilmington, Delaware, as distributors in those waters.

The plant of the Marine Construction Company, Wilmington, is well known to those who are familiar with Delaware conditions.

The addition of the Marine Construction Company to the list of Duplex distributors is another link in the rapidly growing chain beginning with the Atlantic Radio Company and the Walter H. Moreton Corporation, Boston; and extending down

the Atlantic seaboard to the Atlantic Boat Yard Company, Inc., at Miami. Supplemented further by such widely known institutions as Ditchburn Boats, Ltd., Gravenhurst, The Marine Oil Company, New York City, Volney E. Lacy central New York, Julius Steutzer, Detroit; Wm. F. Meier, Cleveland; Put-in-Bay Dock Company, Put-in-Bay Ohio; Matthews Boat Company, Port Clinton, Purdy Boat Works, Manhasset Bay, Berg's Supply Float, Manhasset Bay and other points too numerous to mention. Duplex Marine Engine Oil has a most remarkable distribution and during the 1927 season will be found available in practically all waters.

Another important step in Duplex distribution is found in the appointment of W. L. Masters & Company, Chicago. Masters is well known in the trade and is recognized as one of the leading marine engine distributors.

He is in splendid position to represent Duplex in the Chicago territory as his organization is closely in touch not only with the trade, but with boat owners in Chicago and surrounding territory.

The New Lockwood Twin

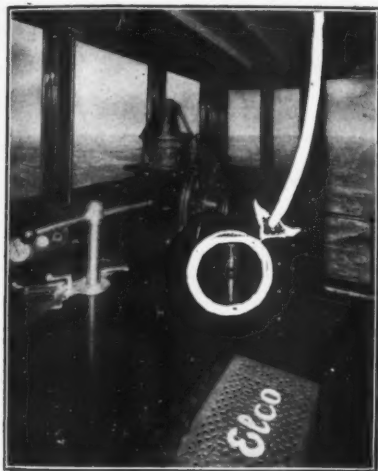
Probably the most outstanding of the 15 new improvements in the Lockwood Twin Boat Motor for 1927 is the Lockwood Pilot, a device best described as one which takes hold of the motor when you let go. Unfortunately it is so small and so inconspicuous that an adequate illustration is impossible. Its purpose, which it perfectly accomplishes, is all-important. The motor is held gently but firmly in any position—straight ahead or on a circular course—that you may leave it. Yet it is entirely automatic in operation, and steering is accomplished with ease. The basic principles are simple, yet several claims of the basic patent application have already been allowed.

Possibly next in importance is the location of the stopping button in the end of the steering handle under your thumb. No need to lose your course and bump the dock while searching for the button to cut off the spark.

There are also the improved magneto with replaceable moisture-resisting coil; larger muffler; the permanent mould castings 50 per cent. stronger; the larger and harder crank shaft; and the Water Guide added to the Stream Line to compel under water efficiency. All the previous features of the motor are retained of course—the combination propeller and rudder steering without a rudder; automatic tilt over obstructions, patented safety propeller; float feed carburetor, etc.

There's Safety Aboard When Protected With

"Fortify For Fire Fighting"



Showing *Pyrene* Fire Extinguisher installation in pilot house of an ELCO Sixty-two

The IMPROVED
Pyrene
TRADE MARK
FIRE
EXTINGUISHER



NO fear of fire at sea—if handy *Pyrene* Fire Extinguishers are on board. Be ready to fight fire intelligently when you are miles from shore. Simple in operation—a woman or child can handle them.

Pyrene Fire Extinguishers have been the standard fire-fighting equipment on motor boats for 16 years.

Specify *Pyrene* Fire Extinguishers for your new boat.

Approved by U. S. Steamboat Inspection Service

PYRENE MANUFACTURING COMPANY

Makes Safety Certain

NEWARK, N. J.

MARICON Hydraulic Remote Controls

Don't design or build your boat around your remote controls. Buy MARICON HYDRAULIC CONTROLS that can be instantly installed in any type of construction just like wiring.

Don't equip for the 1927 season without thoroughly investigating these controls. They are practical, dependable, safe and surprisingly economical.

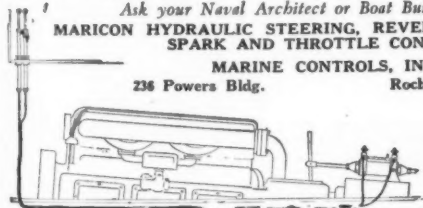
Ask your Naval Architect or Boat Builder

MARICON HYDRAULIC STEERING, REVERSE GEAR, SPARK AND THROTTLE CONTROLS

MARINE CONTROLS, INC.

236 Powers Bldg.

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MIANUS Diesel and Gasoline Engines

DIESEL ENGINES— $7\frac{1}{2}$ to 125 B.H.P.

Each engine designed and built to meet the requirements of the highest class of the American Bureau of Shipping.

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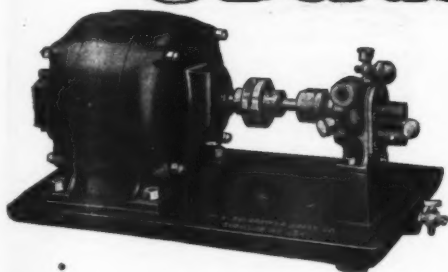
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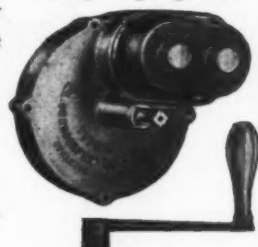
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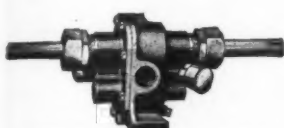
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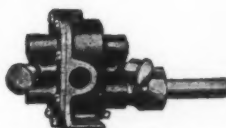
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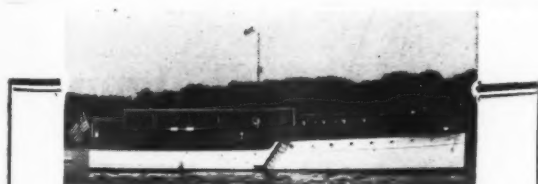
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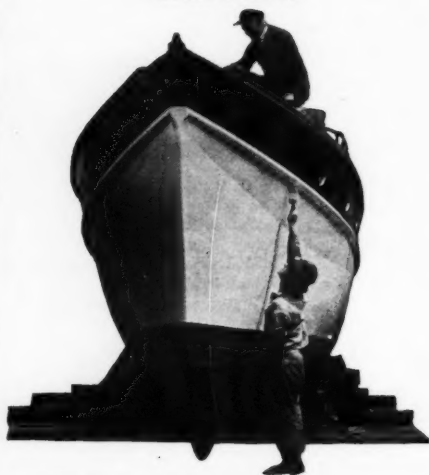
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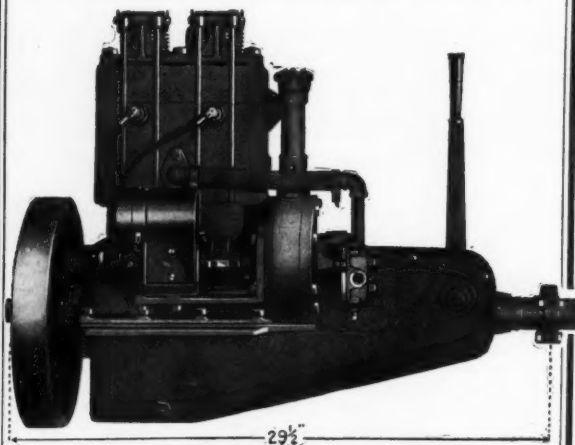
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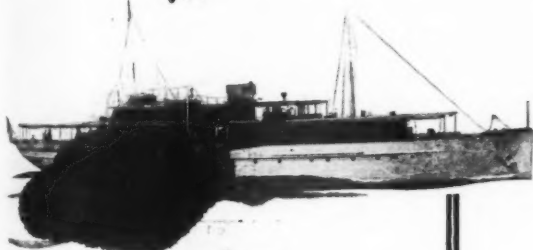
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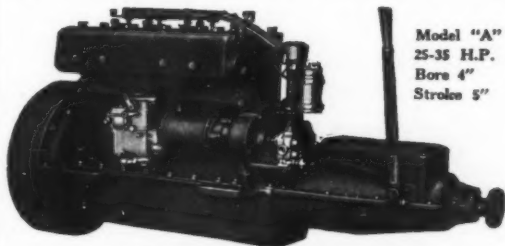
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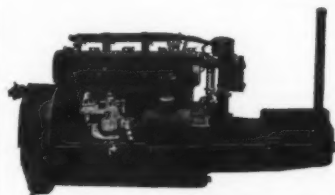
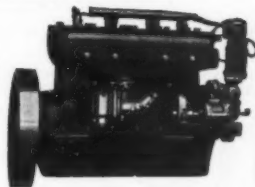


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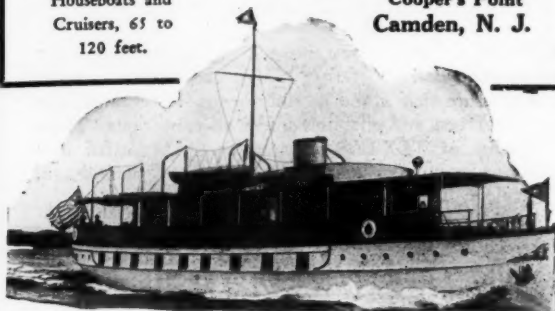
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Up and Down Glen Canyon

(Continued from page 62)

Tom had told us that we would encounter our first really troublesome rapid at the mouth of Bridge Creek, but that, though there was some badly broken water over against the cliff, there was always room to work up a boat along the bar without much danger of having it get out of hand. But troublesome was hardly the word to describe that tumbling wall of rock-churned water. Indeed, annihilative would come nearer to conveying my first impression, for I had known quieter-looking and quieter-sounding rapids that were toothed to grind up a twenty-foot bateau. Far from appearing possible to work up, that rolling patch of boulder-strewn foam looked quite capable of swamping a boat that even tried to run down its tossing combers.

There was no use turning to the Admiral for enlightenment. Knowing full well what he *ought* to find at the mouth of Bridge Creek, the fact that what *was* there appeared to be a rip-roaring rapid that well might have been carried down a hundred miles from the sinister gorge of Cataract Canyon below the junction of the Grand and the Green, left old Tom, his face screwed into a knot of puzzled consternation, quite the most mystified one of the lot.

Some hint of how the trick had been turned came to us as we worked farther up and saw the gnarled fingers of a score of torrents roaring down through the great boulder-fan at the mouth of the side canyon. This muddy discharge was so different from the usual clear stream that Tom came to the conclusion at once that there had been a heavy cloudburst on the upper watershed of the creek—probably on the towering Navajo Mountain itself. How fiercely the flood had run we learned when, penetrating Bridge Canyon later in the day, marks were found indicating that the crest of the descending wave had touched points from ten to fifteen feet above the normal level of the creek.

This savage wall of water, rushing out over the fan of boulders at the canyon mouth, had rolled a few thousand tons of great round rocks down into the rapid where the Colorado was crowded against the opposite cliff. This compelled the rapid to shake down anew, so to speak; to reestablish its disturbed equilibrium. The raw grinding roar came from the new flight of boulders, as its units were banged and bumped along until they found a resting place sufficiently stable to resist the push of the tumbling water.

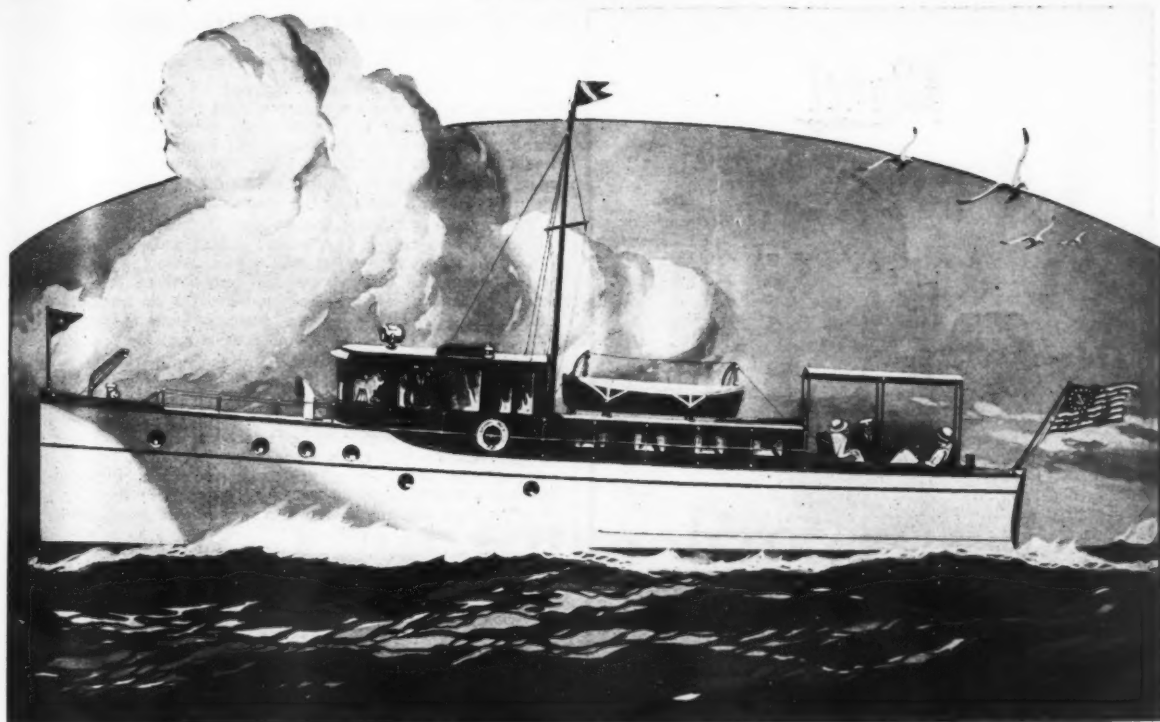
Crossing two swift but boulder-free channels to the left bank, we started working up through a couple of preliminary riffles to the foot of the main rapid. For a hundred yards or so we had some help from the engine; then the boulders began cropping up too thickly for the good of the propeller and all three of us waded and towed. We were half an hour making the quarter of a mile to where the steepest pitch began. Working, as it seemed, to the limit of our rather ill-applied strength even here, the odds against breasting the rapid itself appeared all but prohibitive. That we would be forced to portage in the end seemed certain, though, with the sodden bottoms of the boats already giving out, a drag over the boulders was the thing of all others to be avoided if in any way possible.

By the time we were at the foot of the rapid the flood from Bridge Canyon had been reduced to a few muddy trickles. The hollow resonant chunk of a few rolled boulders still sounded from the middle of the river, but with most of the migratory pellets rocked into comparative repose, the torn and tossing waves we had first seen were becoming ironed down to a more decorous fluency of ripple. The best of the water still looked a beastly place through which to work a boat up, but the penalty in damaged boats that would have to be paid for a portage made the attempt imperative.

We decided to try it first without uncoupling the boats; not that we had much hope of taking them up tandem, but probably because that would still leave something easier to fall back upon if we failed. Before we had made fifty feet it was plain that we had bitten off beyond our ability to chew—that a ton and half of cargo and boats was excessive handicap for barefooted, sore-footed, stumble-footed men to carry in a steepchase over water-washed boulders. But because no one of that cursing, laughing, singing trio would be the first to suggest the giving up of a foot of the distance we had won inch by inch, we hung on, and wiggled on, and finally won through.

The singing, the laughing, and even all but the most fervent and necessary of the cursing, were pretty well confined to the comparatively easy going of that first fifty feet. Once we were out among those rattle-headed boulders that had not yet made up their minds about a bed for the night there was neither time nor temper for frills. When the footing was firm and the current not hitting above mid-thigh it was all very well to make little jokes about the man who put the rap in rapids, but when one had to duck into breast-deep water to prevent a brute of a boulder from delivering one of those

(Continued on page 124)



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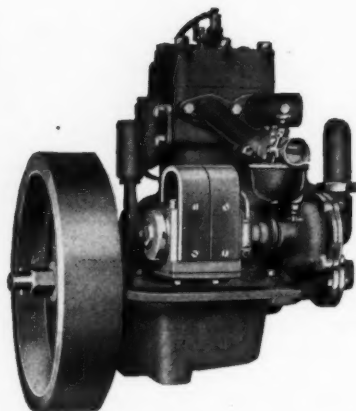
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Up and Down Glen Canyon

(Continued from page 122)

haps, vocal expression was stripped of useless verbiage and became as short, sharp and impolite as the gruntings of a clubbed pig. We may have spat some picturesque curses in the careless rapture of the push-off, and there may have risen the liquid accents of rollicking song; all the spitting and liquid accents there were at the finish had to do with getting rid of the gulped red-brown slush of the Rio Colorado.

That a rolling stone gathers no moss does not signify that it will not try to collect fragments of epidermis and leg-o'-pants. Where the stones of a rapid have settled down for life on a more or less even keel one who wades among them has some little chance of letting his right foot know what his left foot doeth; but on those Rock-a-good-bye-baby, boulders there were just about as many Good-byes, as there were rocks.

Where one's footing held, he had to retain his grasp of the boat to save the boat; and where he lost his footing he had to keep hold of the boat to save himself. That is to say, one had to keep hold of the boat willy-nilly. This, depriving one of the use of his hands to ease the effects of a fall, meant that those rolling boulders had to be buffered by whatever section of the anatomy was fluted against their abrasive sides. I rubbed knees and noses with just about every granite pill in that bottle-neck of river, and couldn't have felt any worse if I had taken them internally.

Tom—many days later, when interest in the lighter things of life began to surge anew—remarked that I had looked as red and raw as a newly-skinned pig when I came up from my rubbing with the rocks; to which Bill added: "And he hadn't much more on, either."

This was quite true. When I was fed into the hopper of that riverine grist-mill I was wearing one shoe and rather more than half a pair of riding breeches. I came out with a shoelace and a girdle. This takes no accounting of cuticle. As there was a greater expanse of hide exposed to abrasion than there was of shoe or breeches the loss was proportionately more considerable in the aggregate; but all the skin grew back in time, so the loss and inconvenience were only temporary.

No sooner were the boats secured in the first eddy above the riffle than Bill and I, like a couple of battle-chewed pups, crawled off among the rocks to lick our wounds and regain our winds. Not so old war-horse Tom, who in mind and body was compact of sterner stuff. Muttering something like "That's half the job for a starter," he resolutely turned his back on the soft seductions of a rock-upholstered couch and started hobbling down across the boulders to where the other boats were waiting at the head of the dividing sandbar a quarter of a mile below.

Tom did not exercise his Admiralty authority and order us back into the breach; not even (as had occasionally happened) did he call us "Mister" and suggest sarcastically that any little aid we might render would be deeply appreciated. But the droop of those muscular old shoulders, more eloquent than either orders or sarcasm, evoked sympathetic action where the spoken word might have been met with passive sabotage if not open mutiny. Hastily securing the wrappings of our unhappy feet, Bill and I reared erect our groggy frames and pit-a-pat-ed off in the water-splashed wake of our game old leader.

Uncoupling the units of Andy's tandem, we began working them up separately. In theory this should have been a deal easier than shoving through in pairs; in practice, possibly because there were two or three very tired and footsore men on the job, it proved quite as punishing as the initial flounder. We started three to a boat, but whoever was helping Andy and me with the rearmost one fell by the wayside where the boulders rolled thickest and left the luckless pair of us to struggle through by ourselves. Andy's feet, swollen almost to double size from sunburn, were just as sensitive to the buff of a boulder as were my own, so the passage was hardly like tripping through a field of dewy dandelions for either of us.

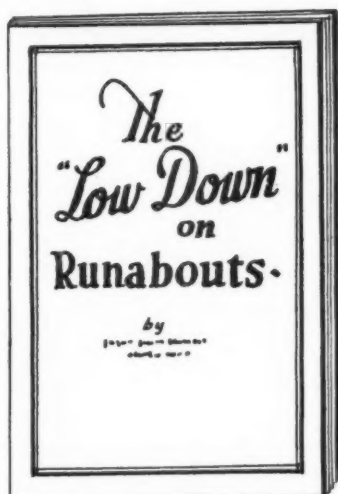
For working up a rapid composed (as that one was at this time) of about equal parts of tumbling water, sand, mud and rolling rocks, three men to a boat are worth rather more than twice as much as are two. When a boulder, like the Ancient Mariner, stoppeth one of three, converting him from a help to a hindrance, the two that remain are usually able to dig in their toes and keep from giving ground. But when one of two goes down in a mess of that kind, the drag of the current on boat and helpless flounderer is rather too much for the survivor to withstand.

This was well proven by the continual little setbacks Andy and I experienced. Where the first boat, with three men, was worked steadily, if slowly and painfully, up the riffle, we were swept back from ten to twenty feet a dozen times, and so, inch by shivering inch, had to crab it all over again. By crab, I mean to refer only to our wobbly, backward motion in dragging up

(Continued on page 128)

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Dependable power for high speed run-
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Detroit Marine Aero Engine Co.
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Up and Down Glen Canyon

(Continued from page 124)

the boat. We were each too dead beat to wax vocally critical of the other's technique.

Of course we dribbled out at the top after a while; but not lightsomely, not with aplomb. All in all, indeed, I recall no other riffle on the river that took so much out of us and gave so little in return. In fact, so far as I was concerned personally, it wasn't a matter of give-and take at all. Rather it was all take. Kipling's *Vampire* only stripped her *Fool* of his foolish hide. The waterwitch that lurked in the heart of that boulder-scour started in on me where the *Vampire* left off on the *Fool*, and continued working inward toward the marrow of my bones. The only reason she fell short of that objective was because there was not another pair of boats to lure us back to her abrasive clutches.

Too weary for the moment to push on a couple of hundred yards to a clear patch of uncovered bedrock where Tom purposed making camp, we boiled a pot of coffee and lunched where we had landed among the drying boulders. That relapse to ease cost an extra half-hour's work. Falling as quickly as it had risen the night before, the receding river stranded all four of the heavily laden boats almost under our noses. As their bruised and battered bottoms made it too risky to drag them over the rocks any more than could possibly be avoided, each one of the heavy skiffs had to be emptied and carried bodily out to where there was enough water to float it loaded. That weary task over, we pulled through the deep quiet eddy backed above the boulder-fan and made preparations for a two-night camp.

To avoid the sweltering midday heat that threatened to broil us alive upon the barred griddle of the sandstone ledge, Tom led us back to the cool depths of an ancient cliff dwelling that notched the right lip of the canyon's mouth. A long siesta, followed by a silt-eradicating soak in the clearing pool below the cliff, restored crushed spirits and bruised bodies to a degree that left them not far from tuning to the peace-purring indolence of our first interval of complete relaxation.

Every one (except my unlucky self, who had to cobble and tailor in preparation for the morrow's walk to Rainbow Bridge) did just what appealed to his butterfly fancy of the moment. First it was archaeological research—excavation for buried antiquities; but that was given up when it was found how peculiarly and distinctively irritating the dusts of the ages are to freshly abraded hide. That, save for some corn husks and fragments of decorated pottery, was the only discovery.

Nothing daunted by failure to unearth antiquities, those unquenchable spirits forthwith set to making them. Andy and Bill Jones, armed with cold-chisels and hammers, hacked primitive Moqui pictographs on the sandstone face of the cliff; Bill Ramsaur, squatted squaw-like, whittled a bone needle; Lute chipped arrowheads, and old Tom plied hatchet and butcher-knife in the fashioning of a nail-less box for hairpins, whatnots and such-like—what one might have called a Moqui lady's vanity case. I, with my modern dress-making, was the only anachronistic splash in an otherwise perfect Neolithic picture; and yet, when you come to think of it, bacon-rind sandals and gunny-sack pants aren't so very unprimitive after all.

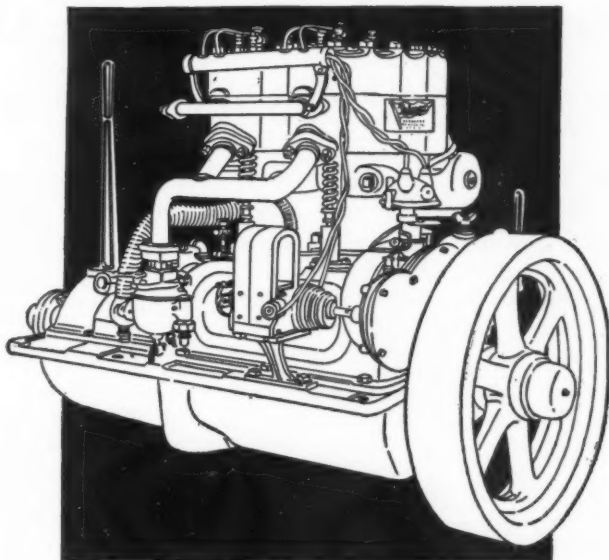
With no predaylight roll-out scheduled for the following morning, we lounged long by the oaken coals of the camp-fire and spun ample-dimensioned yarns of the little things whereby one or another of us had made his own passing contact with this or that nib of the universe kindle sparks of strange experience. Tom, the old fox, waited until the infantile ruck of us had poured forth the milk-and-water dregs of our guarded lives, and then swept the boards with a recital of his life as a Wyoming bank-robber, gambler and horse-thief.

Where Lute and I had stolen eggs or oranges, Tom had galloped away with the bullion of the Bank of Cheyenne in his saddle-bags; where Bill Jones had pilfered a lock of blonde hair, Tom had garnered all the brunette tresses in a Paiute village with his scalping knife; where Andy had taken a week to clean up a chicken-roost, his father had rustled all the steer in a valley at a single drive. Of course it detracted a good deal from the ultimate effect when he wound up by confessing that he had only been telling us in the first person stories that had actually been related to him by a real bank robber and cattle rustler; but just the same, that round was all Tom's. None of us cared to venture into the ring with him again that night.

It was about at this juncture it occurred to me that the tone of the evening might be considerably elevated by a dramatic recital of something from the classics. Possibly the theory would have worked out better had I had the temerity to go all the way back to the classics. Unfortunately, in risking my reputation on "Kubla Khan," I only went half way. As a consequence I had the usual experience of the vacillating in-

(Continued on page 132)

THIS IS THE PALMER PNR



600 Dependable R.P.M.

The Palmer Line

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" 4—4	"	24 H.P.
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" 3—3	"	30 H.P.
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F3—3	"	25 H.P.
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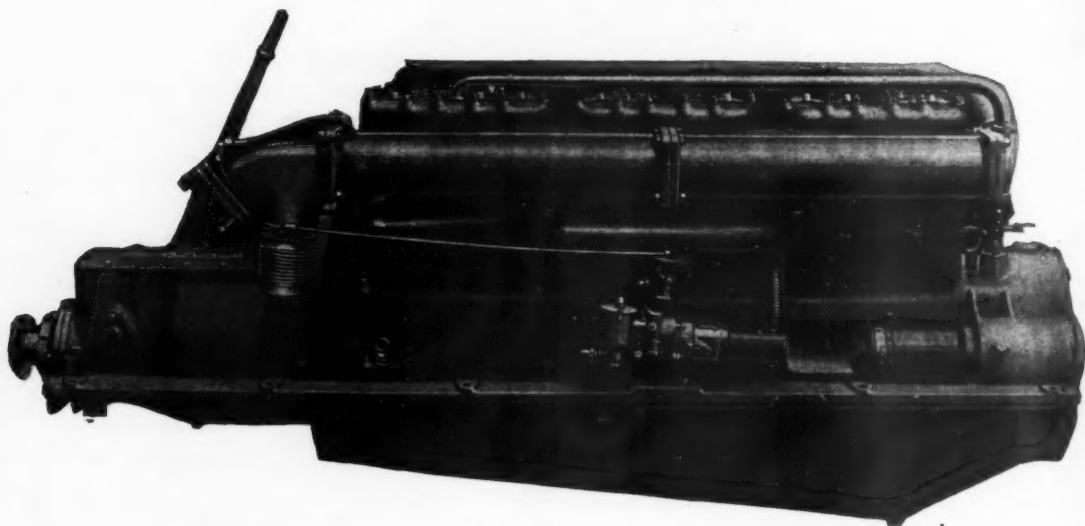
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BEFORE putting your boat in commission this season repower her with a six-cylinder STEARNS Extra Reverse Marine Engine. You'll enjoy its finer performance, smooth running and quietness.

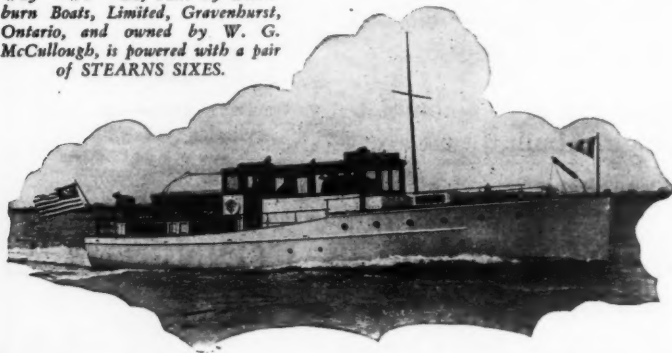
Into the STEARNS Six are built all of the principles of advanced engineering, together with exclusive features of our own, and each part is oversize and extra strong, all of which insures long life and dependable power. For instance, the STEARNS Six has the largest chrome nickel steel crankshaft, and the largest bearings that have ever been used in engines of like size. Forced feed

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MER-6	5 1/2 x 6 1/2	180	1600	2075 lbs.	2080.00

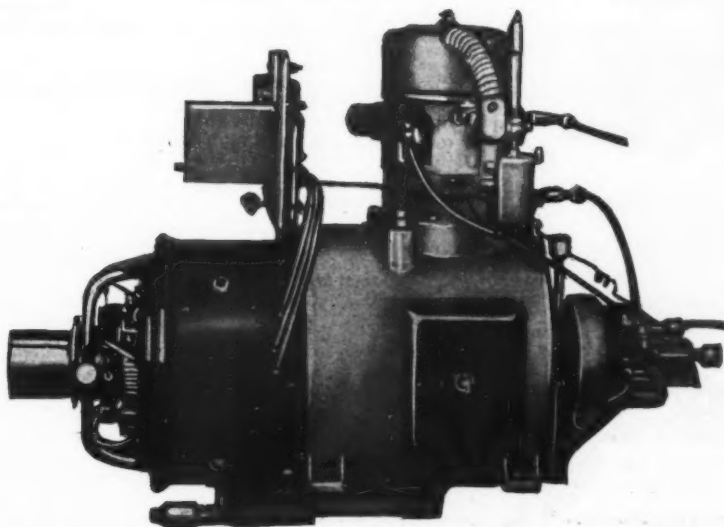
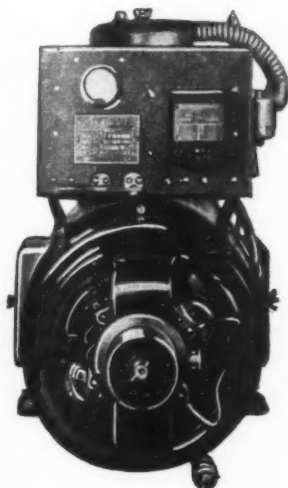
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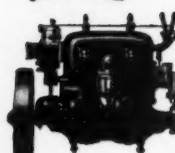
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INCORPORATED

LEESBURG, NEW JERSEY

Experienced Builders—Moderate Rates

Up and Down Glen Canyon

(Continued from page 128)

dividual that sits down between two chairs.

Telling my companions how John Van Dyke had compared the very Colorado roaring at our feet to Alph, the sacred river that ran

*"Through caverns measureless to man,
Down to a sunless sea."*

I proceeded to recite and expatiate. The singular appropriateness of the weird lines was all in my favor, and I started confidently, knowing that they would be getting more and more appropriate right along. The witchery of

*"A savage place! as holy and enchanted
As e'er beneath a waning moon was haunted
By woman wailing for her demon lover!"*

touched their rough fancies and their comment had point and verve.

The lines that I aimed especially to reach and stress occurred a bit farther along. They told how

*"A mighty fountain momentarily was forced,
Amid those swift, half-intermittent burst
Huge fragments vaulted like rebounding hail,
Or chaffy grain beneath the thresher's flail."*

Here I was going to interpolate a comparison between those huge hail-bounding fragments and the rolling boulders which had given our legs such a scouring that very morning. With the boulders still chunky-chunking down in the rapid to lend atmosphere, that dainty little by-play could hardly have failed to be effective in the extreme—had it ever been staged.

But there was a metrical bridge to be crossed before I poised for my supreme flight, and in that bridge Coleridge, who could hardly have been expected to foresee the peculiar conditions under which the lines were to be declaimed a hundred years later, had unconsciously laid a pitfall. All oblivious of the brink to which I tottered, out onto the bridge I tripped:

*"And from this chasm, with ceaseless turmoil seething,
As if this earth in fast thick pants were breathing...."*

The gusty guffaw that arose as the sartorial significance of that last line sunk home quenched for a space the booming of the imminent rapid. Then it died down to gasping snickers and old Tom, rising and stretching himself, delivered the Epilogue.

"If them pants was going any faster than the pair you lost in the rapid this morning, believe me, they was sure going some!"

The breath that I might have expended in indignant expostulation I thought better to blow inside of the inflatable mattress which was to cushion my battered form from the prodding knuckles of the sandstone ledge upon which camp was pitched.

(To be continued)

Hang the Expense

(Continued from page 29)

dock at Southwalk first, starting from here Sunday morning at ten o'clock. Pete will have to go in his car and Jake in his motor boat but beyond that there aren't any rules.

"You mean," asks Pete, "that if Jake sneaks into the garage to-night and swipes the motor out of my bus—a thing he'd be liable to do—you mean a trick like that would be fair and square?"

"I hadn't thought of that," says the commodore, "but now that you mention it, it goes with me. If you can put the motor back in and still beat him to Southwalk, then you're certainly the better mechanic and the most reliable driver."

"Then I'll take the flivver to bed with me," says Pete.

But Jake he didn't say anything.

Now it certainly looked to me as if Jake had the best chance to win the prize. From here to Southwalk isn't more than thirty miles by water, cutting diagonally across Long Island Sound. On the other hand, it's more than sixty miles by land, going in to New York on this side and then out on the other. Pete, of course, could do the distance in an hour and a quarter on a circular track, but on the roads he'd have the cops to watch for, and if he averaged twenty he'd be lucky. That would be three hours from start to finish. Jake, knocking off ten in his motor boat, could easily do it in three, and the only thing to hold him back would be wind and weather. So, as I say, Jake had the edge on his brother.

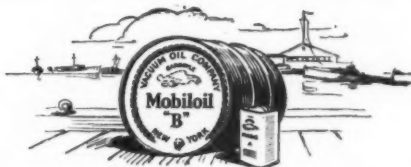
But Pete isn't the kind to let his brother keep an edge sharp. Saturday night, as I happen to know, he borrowed a sauce pan from the kitchen and swam out to Jake's boat where he poured a gallon or so of water into the gasoline tank. After that he stuffed a handful of waste into the end of the exhaust pipe and shoved it in with the handle of the sauce pan. Then he came ashore, well satisfied with the job he'd done.

(Continued on page 134)

What oil is recommended by 57 motor boat engine builders? Mobiloil!



What oil is most preferred by automotive engineers for their personal boats and cars? Mobiloil!



What oil has an engineering margin of safety for your engine? Mobiloil!

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YOUR GUIDE**

THE correct grades of Gargoyle Mobiloil for lubrication of prominent motorboat engines are specified below.

The grades of Gargoyle Mobiloil are indicated by the letters shown below. "Arc" means Gargoyle Mobiloil Arctic.

If your engine is not listed here, see the complete Mobiloil Chart at your dealer's, or write the Vacuum Oil Company, 61 Broadway, New York City.

NAMES OF MOTOR BOAT ENGINES	1926 Engines		1927 Engines		1928 Engines		1929 Engines	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Buffalo, R	B	B	B	B	B	B	B	B
" Heavy Duty Models	B	B	B	B	B	B	B	B
" (other models)	A	Arc	A	Arc	A	Arc	A	Arc
Fry & Bowen, L41, 44, 64	A	Arc	A	Arc	A	Arc	A	Arc
" (other models)	A	Arc	A	Arc	A	Arc	A	Arc
Gray, 2 Cycle	A	Arc	A	Arc	A	Arc	A	Arc
" 4 Cycle	A	Arc	A	Arc	A	Arc	A	Arc
Kermath, 1 to 20 H.P., incl.	A	Arc	A	Arc	A	Arc	A	Arc
" 25-70 & 100	BB	A	BB	A	BB	A	BB	A
" Model 9	B	A	B	A	B	A	B	A
" (other models)	A	A	A	A	A	A	A	A
Lathrop, 110	BB	A	BB	A	BB	A	BB	A
" (other models)	A	A	A	A	A	A	A	A
Niagara, D Series	A	Arc	A	Arc	A	Arc	A	Arc
" Special	A	Arc	A	Arc	A	Arc	A	Arc
" (other models)	A	Arc	A	Arc	A	Arc	A	Arc
Palmer, 2 Cycle	A	A	A	A	A	A	A	A
" Heavy Duty	A	A	A	A	A	A	A	A
" (other models)	Arc	Arc	Arc	Arc	Arc	Arc	Arc	Arc
Peerless, Heavy Duty	Arc	Arc	Arc	Arc	Arc	Arc	Arc	Arc
" (other models)	A	A	A	A	A	A	A	A
Red Wing, Thorobred	B	A	B	A	B	A	B	A
" (Red Top)	BB	A	BB	A	BB	A	BB	A
" Thorobred	B	A	B	A	B	A	B	A
" (other models)	A	Arc	A	Arc	A	Arc	A	Arc
Scotch, F4 & F6	BB	A	BB	A	BB	A	BB	A
" (other models)	A	Arc	A	Arc	A	Arc	A	Arc
Starling, Neptune	A	Arc	A	Arc	A	Arc	A	Arc
" (other models)	B	A	B	A	B	A	B	A
Universal	A	Arc	A	Arc	A	Arc	A	Arc

IN turning to Mobiloil you obtain the oil that is the choice of the men who plan and build engines. 57 motor boat builders attach permanent Mobiloil recommendations to every engine they make. These manufacturers take this precaution to help you get the best possible service from your engine.

Start your next trip with the correct grade of Mobiloil. It has an engineering margin of safety to meet the exacting lubrication demands of your motor. The Mobiloil Chart tells you what grade of Mobiloil to use. If your engine is not listed in the brief Chart on this page see the complete Chart at the Mobiloil dealer's. There is a grade of Mobiloil recommended for out-board as well as in-board motors.

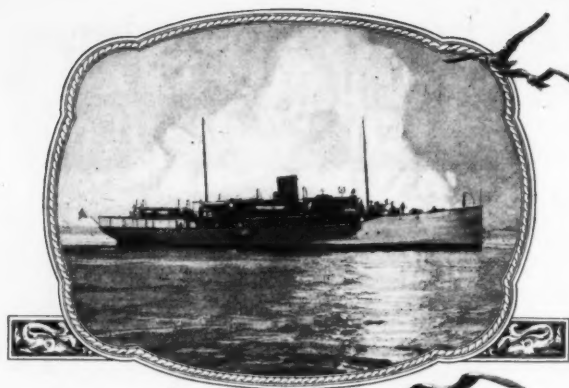


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The VIDOR is absolutely vibrationless.

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Altogether, the VIDOR becomes the latest addition to America's most sumptuous and beautiful pleasure craft.

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Two models, "HR", 400 watts (20-20 watt lamps) "KHM", 1000 watts (50-20 watt lamps). Write us which plant interests you and let us send complete information.

Matthews Engineering Co. Model "HR", 400 watts. Ample current for 20-20 watt lamps.
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A light and ever-dependable dinghy for your yacht

HERE is the most practical yacht tender you can possibly buy. Light in weight, yet remarkably sturdy and durable in construction. Built on the famous "Old Town Canoe" principle—cedar ribs and planking covered with selected non-leak canvas. Unharmful by constant exposure. Illustrated catalog gives complete information. Also shows "Old Town Canoes," including square stern models for outboard motors, sailing canoes, etc. Send for free copy today. OLD TOWN CANOE CO., 785 Middle St., Old Town, Maine.

"Old Town Dinghies"

Advertising Index will be found on page 206

Hang the Expense

(Continued from page 132)

The next morning at quarter to ten the commodore and the boys and I collected at the garage, which is right over the water so the lower part can be used for a boat-house. The commodore says, "Well, boys, the time is getting short and you'd better start up your motors and see that everything's all right."

"My flivver is all right," says Pete, "'cause I hid it out in the bushes last night where Jake couldn't get hold of it."

"And the boat's O.K.," says Jake, "'cause I've got the engine compartment strapped down with iron bars that it would take Houdini to unlock."

"Very good," says the commodore. "I'm glad you haven't played any tricks on each other, because this ought to be a sporting proposition."

So Jake rows out to the mooring and while Pete stands around laughing he unlocks the motor compartment and tries to start her up. Nothing doing. Jake doesn't waste a minute or even ten seconds wearing out his elbow. He sits down in the cockpit and thinks, and suddenly he calls out, "Pete, old rhinoceros, if I'd been mean enough to monkey with your motor I'd probably have stuffed a plug in the exhaust pipe. And that's what you did to me, or I'm a loony landlubber."

At that he takes a piece of wire from his tool chest, leans over the stern of his boat and fishes a handful of cotton waste out of the pipe.

"Stout feller," he calls up to Pete, who still has a grin on one side of his face. "But you've got to get up pretty early in the morning to beat your nifty brother."

Then he cranks her over and the engine starts like a sewing machine. He thumbs his nose at Pete and shuts her off to wait till ten o'clock.

It was a bright, warm morning in late May and I could see that the commodore was pleased with the weather, with himself for thinking of this stunt race, and with two handsome, good-natured sons. He stood down there on the sea wall, looking from the one in the car to the one in the boat and smiling all over himself.

"Now," says he, closing his watch with a snap. "It's ten o'clock and off you go."

With a flick of his hand Jake casts off his mooring line and at the same time starts his motor. Out toward the harbor mouth the motor boat scoots and then after about fifty yards the engine dies, and Pete, climbing into his flivver, nearly laughs his head off.

Pete hasn't even started his engine yet and when he can get his breath he shouts, "Say, Bright Boy, can you figure out what's the trouble now?"

Jake gives him a dirty look and leans into the engine compartment. A second later he bobs out, shaking water off the palm of his hand. "Must have rained last night," he yells. "Carburetor's full of water." And he pulls an oar out of the cockpit and paddles his boat up to the float.

I thought when he walked up the gangway that he was going to haul off and soak his brother one, and I wondered why Pete didn't beat it while the beating was good. But I soon saw that Jake was fighting it out on scientific principles, with a couple of aces up his sleeve.

"Dumb Boy," says Jake to Pete, walking over to the flivver, "what are you hanging around for?"

"I'm waiting to carry you up to the village for a fresh lot of gas. That's the kind of good egg I am."

"And maybe you'd keep going right through the village, eh? Well, save yourself the trouble. I'll draw it from the Governor's tank here in the garage."

"Just try to do it," says Pete. "I locked the pump and threw away the key. Come on, Bonehead, hop in."

"I haven't been living with you for sixteen years for nothing," says Jake, "and here's a duplicate key I cut last week. So on your way, and take the back roads."

There was something in the kid's voice that sounded like a threat and Pete pricked up his ears. "Why the back roads?" he asked. "Have you been pulling any of your dirty tricks on me?"

"Only one. I telephoned the cops along the Turnpike this morning and they're lookin' for a dog-faced boy driving a stolen yellow flivver. Cheerio."

Well, that certainly evened things up for Jake. Pete, looking worried as the devil, drove off without another word, and Jake, acting like he had all the time in the world, drained his tank and filled it up with good gas. When he was ready he started up and beat it out of the harbor, waving goodbye to the commodore and me.

"Smart lads, those," said I to the commodore. "You can expect great things of them when they grow up."

"Yes, Tom," says he. "I expect they'll have to go into the

(Continued on page 138)



Save The Space!

TO one unfamiliar with good small boat interior design, it is amazing to note the comfort that may be had when due attention is paid to proper layout.

Space is always at a premium in such a boat, but particularly so in the engine room, where equipment is apt to be laid out haphazardly.

AMF Rotary Pumps conserve space. Being direct-connected to a high-speed motor mounted on the same base plate, little room is taken up. And since they are positive in action, requiring no priming with suction lifts up to ten feet when the valves are open, they may be tucked away into odd corners.

High volumetric and mechanical efficiencies, and quiet, vibrationless operation are other desirable characteristics. Send for descriptive catalogs.

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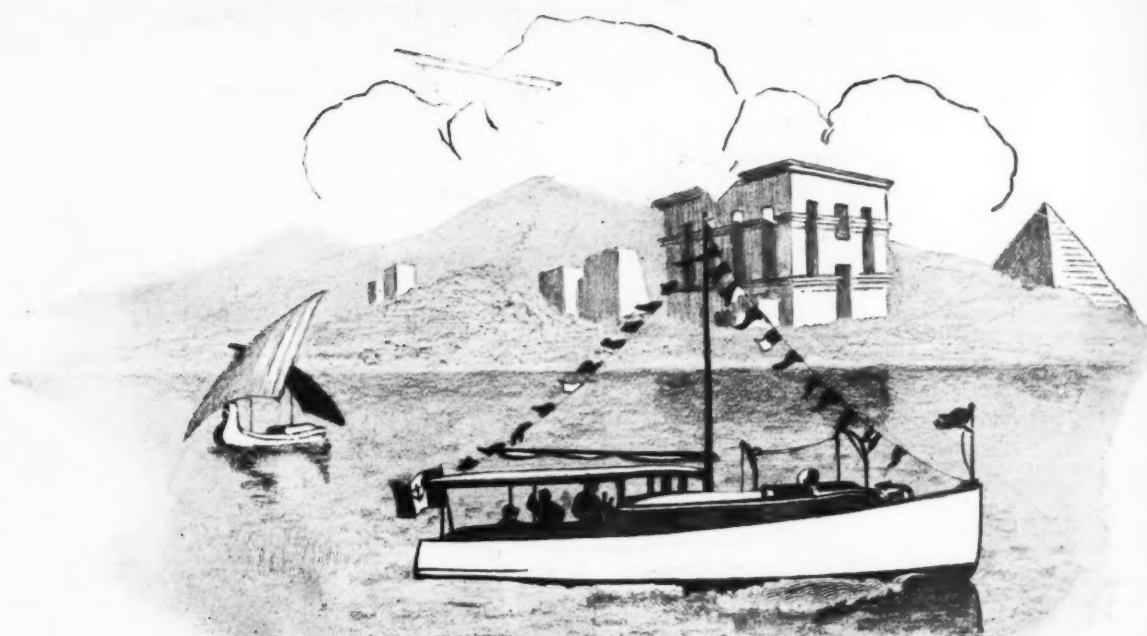
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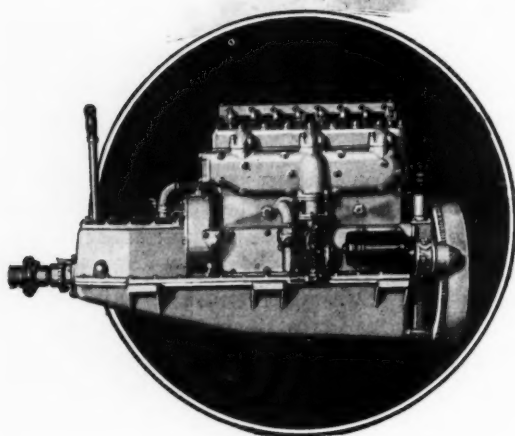
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General Supply Company of
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Standard on the Waterways of the World



Why Kermath Is Superior

Kermath marine motors are built to one standard—the best. They are built in a number of sizes to meet the requirements of speed and power. Kermath motors range in price from \$135 to \$2,300; in size from 3 horse power to 150 horse power. Write for our handbook on Kermath marine motors. It will be sent to you free on request. It will supply you with a fund of interesting data.

It is by no mere chance 80 per cent of the builders of good boats in the United States and Canada specify Kermath. It is through no fortunate accident that Kermath engines have become standard on the waterways of the world. Kermath has won and is maintaining its position for the most substantial and most fundamental of reasons—sheer outstanding merit.

Kermath engines are built to precision limits which are as yet unmatched in the marine engine industry. Kermath tolerates nothing less than the very finest materials and efficient craftsmanship in the building of its product. And good engineering is not enough for Kermath—it must be the best engineering that human ingenuity has evolved.

Small wonder, therefore, that Kermath's dependability is unrivaled, that day in and day out, in foul weather or fair, "a Kermath always runs."

Kermath Manufacturing Co.

527 Commonwealth Avenue

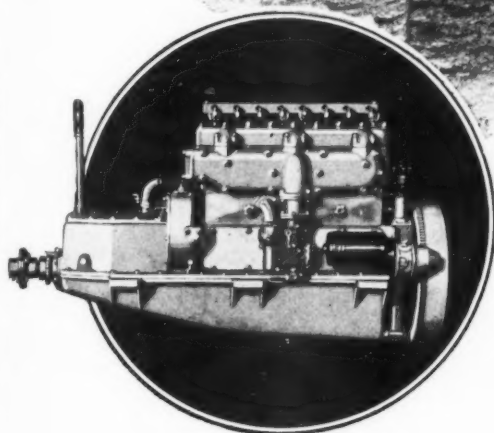
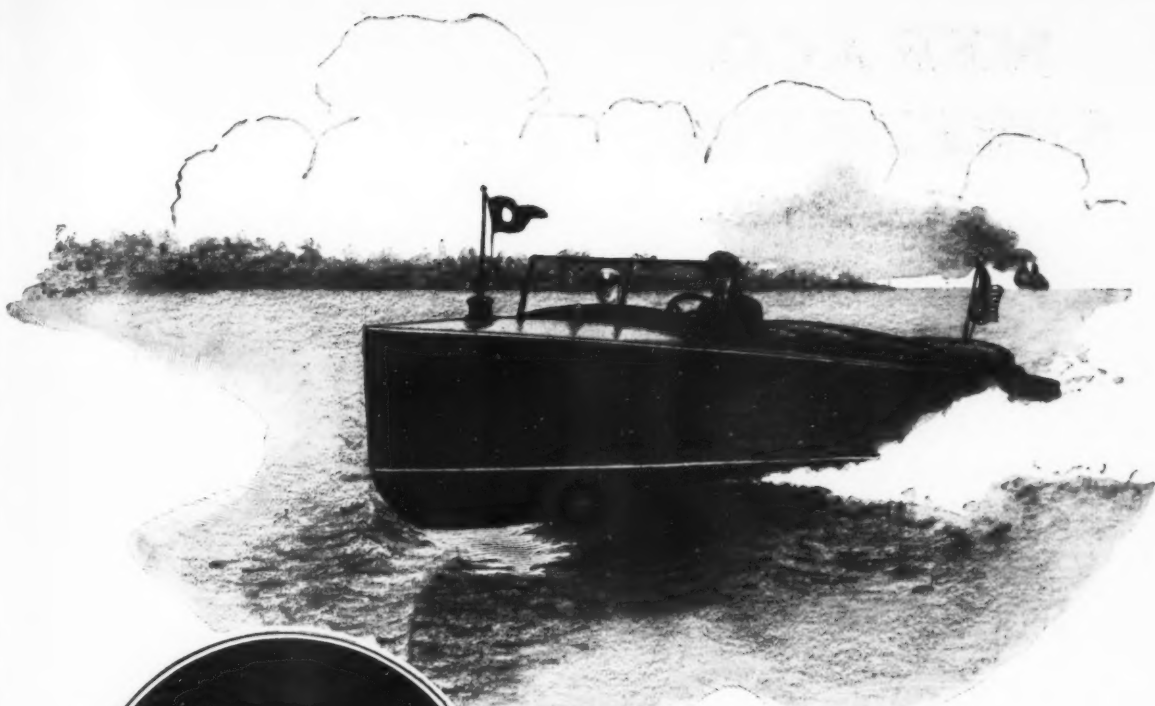
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KERMATH

BOAT ENGINES

A K E R M A T H A L W A Y S R U N S A

Advertising Index will be found on page 206



Why Kermath Is Superior

The Kermath 70 H.P. 4 cylinder marine motor is used in the Chris-Craft 22 foot Cadet as standard equipment. This powerful and highly economical motor affords a driving speed of 25 miles per hour in the Chris-Craft Cadet and similar sized runabouts. Its ruggedness, its freedom from vibration, its excellent turn of speed and acceleration are due to the advanced features of design used. Consider the Kermath—it will pay you.

New Zest to Life— New Edge to Appetite

You, whose nerves are jaded by the strain of modern life—by the hurry and turmoil of your pulsating cities; you who long to feel that old-time freshness and buoyancy—that keen hunger of the schoolboy; to you we say:

Spend your leisure hours and your week-ends in a motor boat. Then you will learn what it means to *live*—really to *live* again.

And bear in mind also that motor-boating reaches its highest peak of enjoyment when your boat is equipped with a Kermath engine. Boat builders everywhere—yachtsmen everywhere—recognize this fact.

For not only do 80 per cent of the builders of good boats in the United States and Canada specify Kermath as engine equipment, but throughout the waterways of the world Kermath is regarded as the standard.

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5879 Commonwealth Avenue

Detroit, U. S. A.

KERMATH

BOAT ENGINES

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The Aristocrat of the Waters

Length 17 feet, Weight 125 pounds

Will easily develop a speed of
of 16 miles per hour

Fast—Comfortable—Durable

Write NOW for Full Particulars

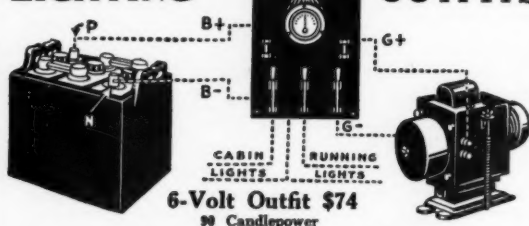
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6-Volt Outfit \$74
90 Candlepower

Generator, Switchboard and Battery

Generator is marine type, fully enclosed; generates 15 amperes at 8 volts; fitted with governor pulley for flat or round belt, or for friction drive against flywheel. Switchboard is 7" x 9". has ammeter, pilot light, three switches and two fuses. Battery is Prest-O-Lite; capacity 100 ampere hours. Outfit is easy to install. Compact, weighs only 104 lbs. Price, \$74 f. o. b. Indianapolis. (Generator only, \$42, Switchboard \$10, Battery \$22.) Order from this ad, or write us.

12-Volt Outfit 180 Candlepower \$85
Similar to above

Same as 6-volt outfit except it is built especially for 12-volt service. Price, complete \$85.00 f. o. b. Indianapolis. (Generator alone, \$49, Switchboard \$10, Battery \$26.)

110-Volt Plant Needs no \$140
Battery

A complete lighting plant—needs no storage batteries. Generates 350 watts, 115 volts, D. C. Uses standard 110-volt wiring, fixtures, lamps, etc. Air-cooled engine and marine type generator. Weighs 125 lbs. 27" long, 13" wide, 17" high. Complete. \$140 f. o. b. factory. 6-volt outfit, \$115. 12-volt, \$125. 32-volt plant with engine 350-watt generator and 16-cell battery \$195. Get full details.

COMET ELECTRIC CO. 1241 St. Paul St.
Indianapolis, Ind.

Electrical Manufacturers for 27 Years

Hang the Expense

(Continued from page 134)

diplomatic service to keep out of jail. And now let's be getting over to Southwalk in the Rolls. We'll take the car ferry to Greenwich."

"But the ferry hasn't started running yet," I said.

"Oh yes it has. First trip of the season this morning at ten-thirty. We have ten minutes to make it.

"And what's to prevent Pete from doing the same thing?" says I, hopping into the Rolls and opening the door for the commodore.

"Only his youth and ignorance," says the boss. "Young people are so impulsive they never think."

But I know Pete better than his father does, and when we got aboard the ferry I looked for him and found him at the bow, the first car in line.

"That's Jake," says Pete, again laughing fit to kill himself, and pointing to a black motor boat ahead of us. "A good brother, but a dumb one. If he hadn't tipped me off about the cops I'd never have thought of looking up to see if the ferry was running. At this minute I'd probably be explaining myself to some judge down Flushing way."

"Still," I said, "he's keeping ahead of us. I'll put my money on him."

"You'll lose," said Pete. "He used to race the ferry last year and it always beat him by about two miles per. Look, we're gaining on him all the time."

I was glad then I hadn't flashed any money, for sure enough, the ferry was overhauling Jake and in ten minutes we altered course to pass him. The commodore joined us when he caught sight of Jake, and had a word to say.

"The young idiot," he grumbles. "Why doesn't he cut diagonally across to Southwalk? He's adding to his course coming this way. Peter, you haven't missed a trick yet and I certainly hope you win the race."

"I'm still betting on myself," says Pete, modestly. "But look, he's holding up a rope and asking for a tow. Is that fair, Dad?"

"You are taking the ferry, Peter," the old man reminds him, "and I don't see why he shouldn't do the same."

Pete and I ducked back through the runway to the stern and got there in time to see a deck hand making Jake's towline fast. The motor boat yawed as the ferry took up the slack, and then straightened out astern of us. Jake stopped his engine and leaned back in the driving seat with a happy smile on his face. Probably he had a life-sized picture of his loving brother explaining to one cop after another that the yellow flivver wasn't stolen. Then he caught sight of Pete on the ferry and wiped the smile away.

"All right, Pete, you win again," he called. "I'll start the motor and you can cast off."

"I don't take candy from babies," says Pete. "I've got you beat by an hour already and you can tow the whole route for all of me. But of course—"

He stopped because here was the first mate climbing down the ladder from the boat deck, sputtering that he wasn't in the tow business and any time anybody caught him towing a damn motor boat across the Sound they could put him in the crazy house because that would be where he fitted.

It was too bad, I thought, that after Pete had refused to take an unfair advantage of Jake the lad should be cast adrift. But there it was. There was no arguing with the mate. He cast off Jake's line and heaved it aboard the motor boat.

And then a funny thing happened. Jake, with his motor running full speed, sagged back five yards until he hung on the downhill side of a wave in the ferry's wake and there he stayed. The ferry was faster, boat for boat, but the suction of its wake gave Jake the extra two miles he needed and he kept with us like he'd been tied. I'd heard of such a thing before and hadn't ever believed it, and the passengers on the ferry wouldn't believe it even when they saw it with their own eyes.

"Sure," I heard one of them say, "that kid in the motor boat could do twenty miles if he wanted to. He's just loafing along at half speed and following us for smooth water."

But Pete and I knew better and it worried him to see that his brother was getting such a good break of luck. For five miles or so Jake stayed with us and when he sheered off outside Little Captain Island Pete said, "He's got the jump on me now and if I have a blowout along the road he wins the prize."

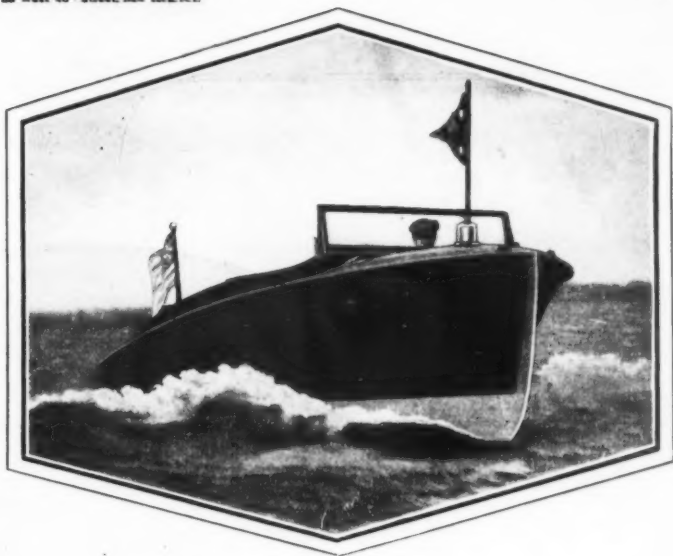
"Cheer up," I told him. "You've got the same distance to do from here to Southwalk, and the best he can make is ten miles per. If you blow a tire you can breeze in on the rim and still beat him."

"Right you are," says Pete. "And here's hoping he runs aground behind the Norwalk Islands."

With that kind, brotherly wish the boy goes forward and

(Continued on page 142)

FAYBOW Thirty-Foot runabout, double cockpit model. Seats 12 and has a speed of 21 miles per hour. An ideal craft for all runabout requirements.



Your FAYBOW IS READY

ANSWER THE CALL TO BOATING with a FAYBOW runabout. It will thrill you with delight as you glide quickly over the cool waters of river, lake or seashore. The combined skill of the boatbuilding industry could not produce for you a finer runabout at lower price than the FAYBOW.

In the FAYBOW runabout you have every refinement that makes motoring on the water an unequalled sport. And, in the design and workmanship of FAYBOW runabouts, the engine as well as the hull, every care is taken to insure the owner long uninterrupted and satisfactory service at the minimum of cost.

Four FAYBOW Models

TWENTY-TWO FOOT

Speed, 15 miles per hour.

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Powered with 27 H.P. FAYBOW engine.

Speed 17 miles per hour.

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Powered with 55 H.P. FAYBOW engine.

Speed 21 miles per hour.

THIRTY FOOT, SINGLE COCKPIT

Speed, 21 miles per hour.

THIRTY FOOT, DOUBLE COCKPIT

Speed, 21 miles per hour.

All FAYBOW runabouts are salt water equipped, luxuriously upholstered and handsomely finished.

FAYBOW runabouts offer a choice of four models, in sizes of twenty-two feet to thirty feet and speeds of 15 to 21 miles per hour. The thirty-foot model may be had with either double or single cockpit. These handsome boats are capable of fulfilling every purpose for which a runabout may be wanted; yacht tender, commuting, touring, family outings or as a gentleman's speedster.

FAYBOW runabouts are powered with FAYBOW marine engines which are backed by over a quarter century of experience in building 100% marine engines. When you purchase a FAYBOW runabout you have one guarantee covering both the hull and the power plant.

Order placed now will insure prompt delivery of your FAYBOW Runabout

Write today for descriptive bulletin and price list.

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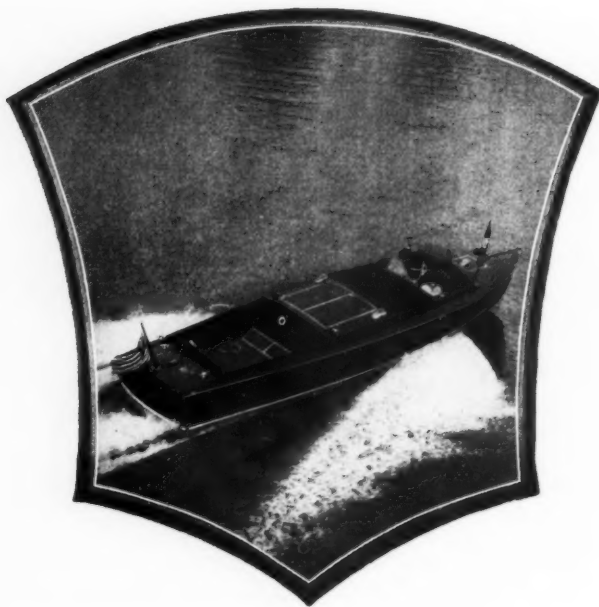
BALTIMORE

Pratt & Gay Sts.
Messrs. Mahon & Gall, Inc.

FAYBOW Twenty-two Foot, single-cockpit runabout. Solid mahogany construction, natural finish. Speed 15 miles per hour.



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The DART → ← RUNABOUT

The sport trend is toward the water!—and riding the crest of this ever-increasing wave of enthusiasm is the Dart Runabout (26-foot). This trim mahogany craft is the embodiment of motor car speed, comfort and luxury on the water. No motor boat in her class can match Dart beauty of lines, sturdy construction and ability to satisfy. Her selection as an auxiliary craft by many wealthy yachtsmen suggests leadership in the Runabout field.

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MIAMI, FLORIDA
Atlantic Boat Yard Co.

Advertising Index will be found on page 206



Here's another popular Dart model—the Junior (22½-foot)—a smaller edition of the Dart Runabout . . . made of the same high quality materials, in the same factory, and by the same craftsmen. Your pride in Dart ownership can begin this season by writing immediately for complete information regarding exclusive construction features, prices and delivery.

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Starting Position

Fast and Slow Speeds Forward and Reverse



You can start your Caille motor at the dock and let it warm up. Then you can glide off, fast or slow, forward or back, and under perfect control by merely raising or lowering your steering handle. Some other Caille features are—Practically Vibrationless going, Dual Ignition, Safety Tilting, Light Weight,—and You can pay as you play. \$32.00 puts a motor on your boat—the rest in easy payments. Write today for free book on this wonderful motor.

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**SELECTIVE TYPE
SPEED CONTROL**
 0, Neutral; 1-up, Slow Forward;
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 Fast Reverse.

4½ Brake H.P.
SPEED OVER 20 M.P.H.
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CAILLE



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THE "Old Town" Square Stern Sponson Canoe is the ideal craft for a portable motor. It is light, buoyant and easy to handle. Surprising speed can be developed from an outboard motor clamped to the stern of this canoe. Made with or without sponsons (air chambers).

Free illustrated catalog gives complete information about sailing canoes, square stern canoes, dinghies, etc. Write today. OLD TOWN CANOE CO., 784 Middle St., Old Town, Maine.

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Running Water

(200 GALLONS PER HOUR)



Running water, under pressure to every part of your craft the same as in your home.

Permits the use of standard plumbing fixtures. Compact (10" x 26" x 22" high)—quickly installed—quiet—economical—automatic operation from any electric circuit. An outstanding value of \$85.00 f.o.b. factory: a written guarantee.

NAVAL ARCHITECTS AND BUILDERS—There is a DAYTON Automatic water system for every type of boat. Send for free catalog and let us further assist you in selecting the water systems that will most efficiently and economically fit in with your plans.

F. O. B. DAYTON

\$85.00
THE DAYTON PUMP & MFG. CO.
 DAYTON, OHIO, U.S.A.



Hang the Expense

(Continued from page 138)

hops in his car, and when the ferry docks he's off like a streak of yellow lightning. By the time the commodore and I were ashore in the Rolls he was out of sight.

"Step on it, Tom," says the boss. "A big car like this never looks like it's breaking the law, and we want to get to Southwalk first."

But there was no breaking the speed law that bright May morning, with a couple of hundred thousand highway lice blocking up the Post Road. It took us fifteen minutes getting out of Greenwich and half an hour driving through Stamford, and every time we saw a green light ahead of us it turned to red as we reached the corner. And all the time the old man was looking at his watch and telling me to give it the gun. Finally he said, "Take the back roads, Tom. That's what the boy has done or we'd have caught up with him an hour ago. I don't know anybody that can beat you snaking through traffic, but you've got to use your head to make time through a mob like this."

Just then we came to the top of a hill and saw a mile of cars ahead of us and a fine clear golf links running off to the right.

"If we take to the grass across the links," I said, "we'll save a mile and land in an empty country road over there to the right." But the commodore wouldn't think of it.

"Nobody but a Bolshevik would drive a car across a golf links," said he. And then we took another look at the links and saw a blob of yellow streaking it across the green grass, half a dozen golfers shaking their fists after it.

"There he goes," cried the old man. "It'll cost me a pretty penny to replace the divots, but by gad I like to see a go-getter like that boy! There's no stopping him." And the yellow streak busted through a hedge and melted into the back road.

Well, after that I knew who'd win the race. Jake was a bright boy and a go-getter like his brother, but there weren't any golf courses out there in the Sound that he could cut across. We pulled up at the dock at Southwalk ten minutes later, being an hour and a half out of Greenwich, and saw the Bear Cub lying alongside—as pretty a piece of mahogany and brass as ever I laid my eyes on.

The deck hatches were open and there was a black head of hair bobbing up and down around the engine.

"Five minutes, sir" says the twin, looking up. "Had a fair tide and wind and averaged better than twelve coming down. Peach of a day on the Sound. Where's Pete?"

For I had the wrong dope, you see, and it was the motor boating twin that won the race.

The commodore and I looked around and saw the other one running up afoot, his clothes torn and his face dirty.

"So Jake wins, the lucky pup," says he. "Did you say anything about a second prize, Governor?"

"I didn't," says the commodore. "But you both of you raced hard and I suppose it could be arranged. What did you have in mind?"

"Oh, nothing much," says Pete. "A big motor bus ran through me a couple of blocks back and I had to leave my flivver in an ash can."

"You mean," says the commodore, "you'd like a new flivver as a consolation prize?"

"Not for mine," says Pete. "Nothing's safe on the roads nowadays but an armored car. If it doesn't cost too much I'll take another one of those Bear Cub babies and duck the traffic."

"Hang the expense," says the commodore, grinning all over. "If you want to know it, the whole idea of this race was to turn you into a motor boatman like your brother."

A Magnificent Boat Sales Salon

(Continued from page 42)

spected with no hindrance to a clear and complete view.

There are shown the 47 foot cabin cruiser, the 41 foot bridge deck cruiser, the 35 foot trunk cabin cruiser, and a Belle Isle Super Bear Cat, together with a complete line of the Hall-Scott engines, both in the straight drive and reduction gear types. The space on the 58th Street side of the building is divided into the general offices of the company, which are reached from the 57th Street entrance. The Hall-Scott service division opens on the 58th Street side, and carries a complete line of parts and accessories used in connection with the service of these engines. A crew of service men is available for immediate call to any point where the engines go. Considering the show room and service facilities as a whole, this location and display room are unequaled in the United States.

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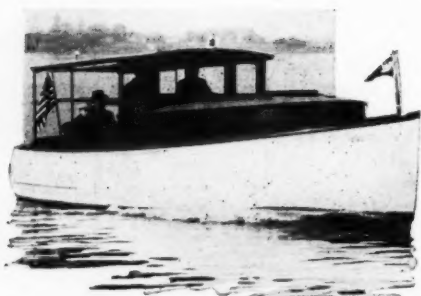
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THERE'S a foxy idea back of that purchase. In buying them the world's best family runabout,

I'm solving a big problem of modern life. This beautiful, fast, safe, reliable roomy boat for fishing, swimming, picnics, moonlight spins, will keep them off the crowded motor highways away from roadhouse temptations. It will bring them health, pep, a barrel of fun and an appreciative respect for their old man. Cheap at twice the price, eh?



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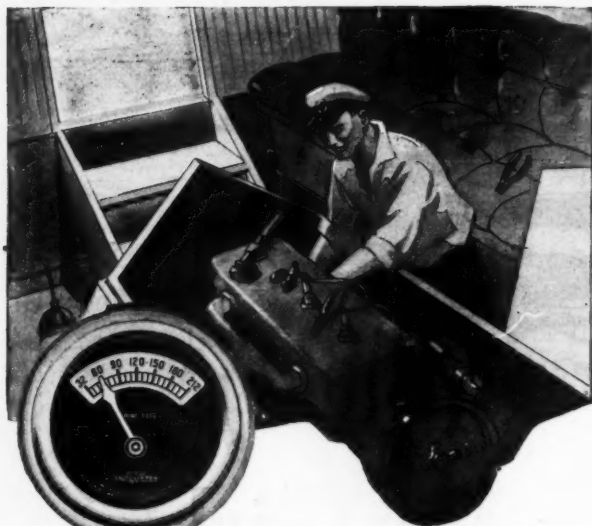


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Ruined Cities and Rare Birds

(Continued from page 39)



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cept at its narrow entrance, for it is shaped like a sack or an oriole's nest. On the north side there is an offsetting, smaller bay where we saw an empty turtle crawl, that is a pen of stakes driven into the bottom through shallow water. Here the sea tortoises are kept until the fishermen are ready to kill them for their shell or meat.

The temple—which has conical stone decorations about a foot high on its roof, stands at the very head of the lagoon, which terminated in an abrupt wall of jagged limestone. From under this wall or cliff come bubbling out two subterranean rivers of fresh water. One of them runs on the surface a few yards through a small chasm in the rock before it reaches the lagoon, but the mouth of the other under the rock can be detected only by the sight of the fresh water boiling up through the salt. McClurg cast back through the bush looking for further outcroppings of these rivers but could find none. It is the nature of limestone to break into pockets and hidden chasms and Yucatan is full of subterranean ponds, rivers and even lakes. Many of them were used by the old Mayas for their supply of drinking water, and some are reached through tortuous, descending caves.

The treasure in this lagoon was nothing less than several wall paintings, very well preserved. There is a jaguar and a feathered serpent in two shades of green, and several impressions of the mysterious red hand.

There are many signs that this temple is being used by modern Indians. A trail debouches near it. A fresh beam with the bark still moist had been put across the western end of the temple to hold up the sagging walls. There were palmetto leaves on the floor, where someone had made a bed, and there were fresh ashes before the altar. On this was the dried skin of a rattlesnake, and another lay nearby. Gough suggested that these had been put here by natives as part of modern rites to the sacred serpent. We take little stock in this suggestion, for snakes which are about to shed their skins like the darkness of temples, and use the rough stones as an aid in the process of undressing. It is interesting that although we have found several snake skins before these, we have not yet seen a live ophidian. We are quite content to have it this way.

There is certainly a dramatic fitness in the sight of these snake skins before the likeness of the Serpent God. Did these rattlesnakes recognize their mythological ancestor? What a part the serpent has played in the imaginations of primitive man!

The itch to find as much as possible before a shift in wind should cover the coast with surf and make landings dangerous or impossible drove us from Chakalal at sunrise. Forty-five minutes later our thermometer registered sixty-seven degrees Fahrenheit in the shade. Brrr, that is cold.

Anaclito Oc had already been sent back to Paalmul in the Imp, with a reward for his services big enough to raise the price of all ruins to us if other natives hear of it.

After a four mile run before the boisterous wind which enabled us to save fuel we sighted another of the characteristic outpost temples. Spinden says they remind him of signposts marked "Here Is A City."

We went ashore to investigate. In the rear of the flat-roofed building was an altar, with traces of recently burned incense. Leaning against the back wall of the building, their bases in these ashes, were two small crosses of planed wood. While Spinden was measuring the building I took these crosses outside and photographed them. I had just finished when I saw an Indian coming along the beach of the lagoon behind the small promontory on which this temple stands. I dashed inside and restored the crosses to their places on the altar for it is becoming very evident that the Indians regard these temples of *Los Antiques* with a certain reverence and that to a large extent they still resent foreign intrusion.

Gough and Whiting, who were on the beach, engaged this Indian in conversation till we descended from the steep promontory. He said he was General Jose Puk (pronounced Pook), Chief of the Indians of Acomal. The locality of this temple where we had found the crosses is called Ak, said the General, which means Turtle. It has a good canoe harbor and is a sort of suburb of the ruined town of Acomal. The General said the best way to reach those ruins was to go down the coast two miles to the modern village of Acomal and then strike inland. So he came aboard with us.

At the sight of another Indian General boarding the schooner McClurg threw up his hands. Puk is indeed a picturesque *hombre*. At this moment he was wearing an English cloth cap with the visor turned backwards, a red neckerchief and a green flannel shirt. From lanyards over each shoulder which crossed on his chest were suspended a catskin pouch and a *machete*. With the exception of the sandals on his feet he wore nothing below the waist except a pair of B.V.D. drawers. He has side burns and moustache, but they are so sparse that they don't

(Continued on page 148)

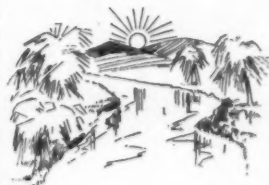
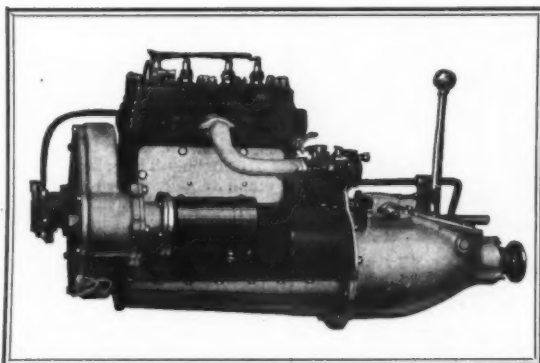
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Ruined Cities and Rare Birds

(Continued from page 146)

show unless they catch the light just right. With aquiline nose, strong chin and fine, frank manly expression he is altogether the most attractive Indian we have yet met. When we reached his village he changed his cap to a six gallon felt hat with a picture of a houri on a beer tag stuck in the band.

We presented his children with dolls, rubber balls and jack-knives, and his wife with a bottle of perfume. The General promptly appropriated this, so we gave the poor woman another. Thereupon the General took that, too. I remembered we had a bolt of colored calico on the schooner and sent Nelson after it for the woman but I am not sure the General has not had it made into drawers.

Anyway he earned his presents. In the morning he took Spinden, Whiting and me to a pair of temples much like those at Chakalal except that one has human heads in stucco on the exterior front wall, one at each side of the door.

Insect life was plentiful at Acomal, and we stopped every few minutes for tick inspection.

Simultaneously Whiting and I began to feel chilly and feverish, with aching backs and legs. Therefore we did not accompany Puk in the afternoon when he took Spinden to four more temples. But McClurg and I ran Imp into a lagoon about half way between Acomal and Ak, where Puk said we could find a ruin. It turned out to be one of those interesting combinations of a larger building built over and completely enclosing a smaller one, a temple over an earlier shrine.

All good things end at last and this north wind faded last night (Friday) and gave way to a ripping breeze which came from a point a little south of east. At eight bells in the evening Gough snatched up his anchor and stood off shore. He lay off and on all night, not attempting to make much headway and not troubling to hang a light in the rigging. It is a deserted coast. We have not sighted even a canoe off the beaches since we left Cozumel on Monday.

What a different picture it must have made seven hundred years ago! Xkaret, Paalmul, Chakalal, Ak and Acomal are as close together as towns on the Connecticut shore between New York and New Haven.

We believe that one or all of the three large towns seen by Juan Diaz, the Spanish sailor in 1517 were among the five sites which we have just finished exploring.

Daybreak found us wallowing in a short green chop. Under our lee was the crumbling temple and high mound which probably gave Paalmul (Broken Pyramid) its name.

* * * * *

We went on to Puerto Morelos, which we reached in early afternoon. This place has a good harbor for boats of not more than ten or fifteen feet of draft, and it has a sizable dock, a lighthouse and a narrow guage railroad running to chicla campo a few kilometers inland. Otherwise its chief features are sand and an air of dismal decrepitude. We were disappointed to hear from *chicleros* that the ruins in the interior seemed to have no particular artistic interest. And with Spinden sea-sick again and Whiting and me full of chills and bone misery we decided to run back to Cozumel.

There a Mexican doctor announced that Whiting and I had malaria. Our cots took up so much room in the schooner's hold that there was no place for Griscom to skin his birds or for Spinden to plot his ruined temples. Therefore, we decided to go to Belize by a freight steamer on which McClurg had already engaged passage. The work McClurg came to do was finished, and he had just had a radio saying his business needed his attention.

After two weeks in Belize I was better, but Whiting was still nursing so much fever that it was obvious he was out for the season. Accordingly I shipped him back to the States. The steamer which carried him made a special stop at Cozumel to pick up Griscom. The bird man had finished his work with the establishment of the fact that there are some eighteen species of birds on Cozumel Island which do not exist anywhere else in the world. During his labors he has also noted some two hundred species on the mainland, most of them heretofore unreported there. Last but not least, he has discovered six species of birds absolutely new to ornithology, and thinks there's a good chance that a seventh will prove new when he can check up on specimens in certain English museums.

Meanwhile Spinden was discovering another archaeological site of importance (this on Cozumel) and several lesser ones in the same locality. Although this island is only some twenty-four miles long and six or seven wide the bush is so thick that the chances are that ruins unseen by white men still exist to be found by future explorers.

One day the schooner was anchored off the northern end of this island when a norther bore down with scarcely any warning. One of the small boats—and Spinden and Griscom.

(Continued on page 152)

John H. Wells, Famous Architect Endorses ERICO-KAINER SPECIALTIES

Outstanding among the prominent naval architects of this country is John H. Wells who specializes in fine motor craft, from speed boats to Diesel yachts. Wherever practical, and that means almost everywhere, Mr. Wells recommends and uses ERICO-KAINER products. Notable among the many fine boats of Wells' design launched last year is Sylvia, a 133 ft. Diesel yacht shown below which is equipped with some ERICO-KAINER Marine Specialties.



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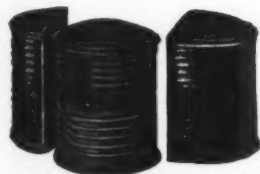
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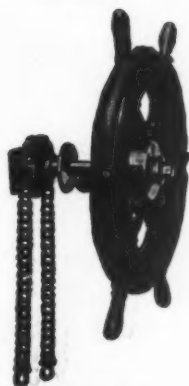


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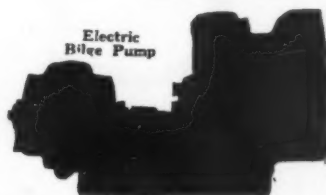
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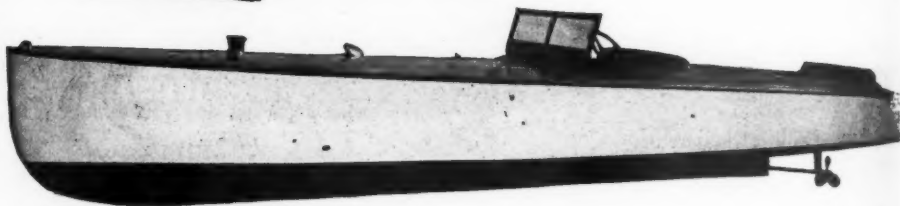


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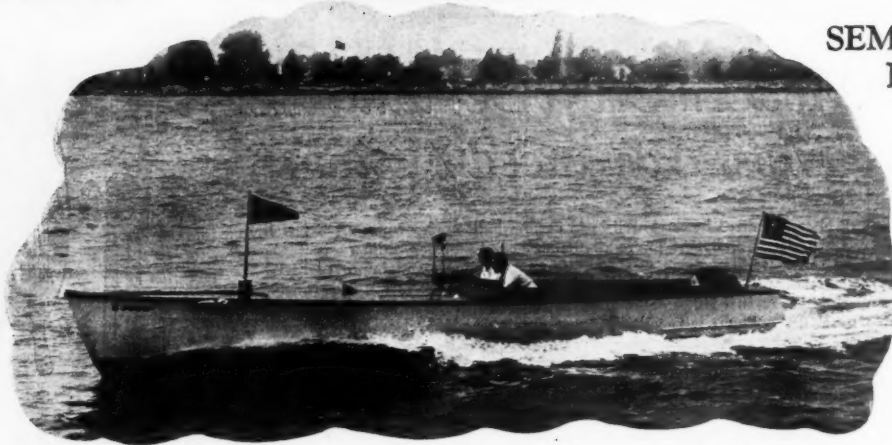
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This 26-foot, SEMI V-Bottom Runabout has 5' 8" beam and draws 1' 8". No better boat of her type has been designed. Choice of power plants and a price that will be a revelation to you.



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The Famous Chance TOMBOY has made hundreds of friends. It is 32' long, 6' beam, draft is 21" and the 14' Cockpit accommodates 10 persons. Built of the best materials obtainable, fully equipped and priced on a basis of quantity production. Speed up to 38 m.p.h.

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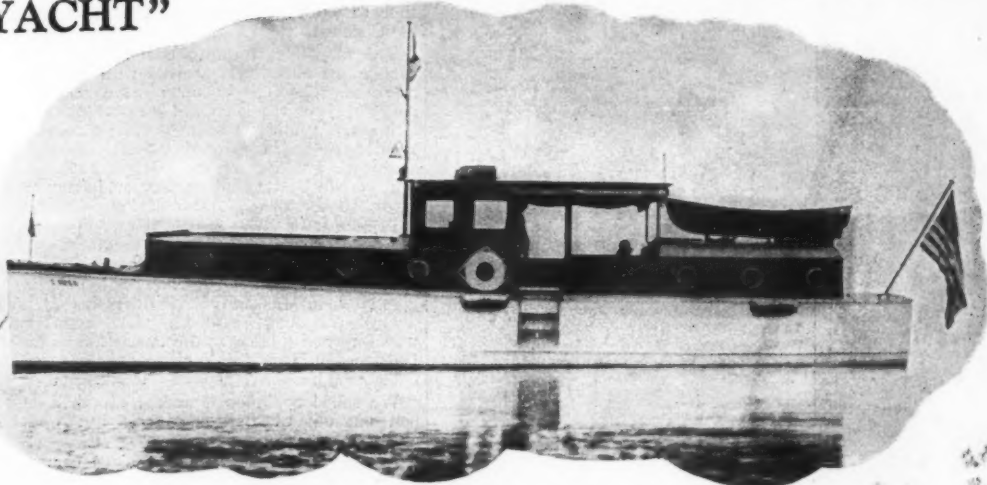
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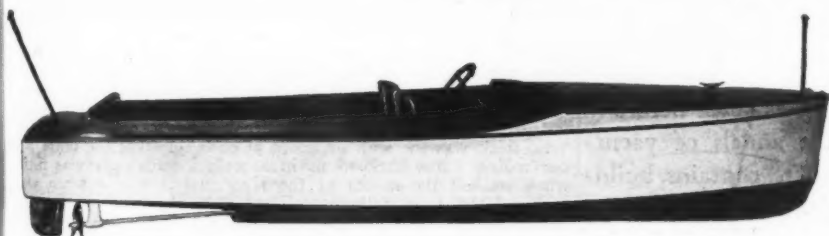
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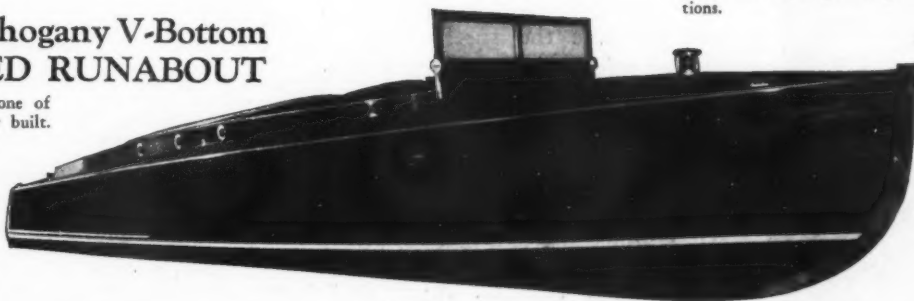
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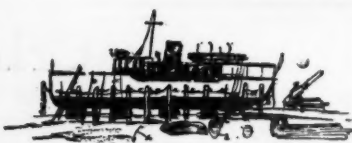
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Write us for your copy now, as this edition is very much in demand and the supply limited.



Ruined Cities and Rare Birds

(Continued from page 148)

had to be left ashore. The other boat just reached Albert in time to work her around to the lee on the southeastern shore of Cozumel.

The day that Whiting boarded the steamer at Belize for Mobile the old Albert arrived with Spinden nursing a temperature of 102. The doctor cheered me by vowing it was not malaria, just the effects of exhaustion, indigestion and seasickness. While Spinden lay in the bed Whiting had just vacated he and I planned the last lap of the expedition. By water we would reach the head of Lake Bacalar, in the Mexican Territory of Quintana Roo, and from there strike overland, trying to reach the railhead at Peto, Yucatan.

While Spinden was still in bed I boarded Albert to take stock of stores. There was the old familiar smell of wet floorboards, groceries, and an undercurrent of gasoline. It was like getting home again—after my absence with malaria, but to a deserted home. Rain was falling outside, another norther. I opened a bottle of rum, but found small comfort in it. Whichever way I turned there was the unaccustomed sight of a bare bunk. I listened in vain for Whiting's oaths, McClurg's chuckle, and Griscom's bubbling, runaway laugh.

We sailed again on Tuesday, March 2, at the very hour we had put out of Belize before. But we shipped with three ghosts.

At first we retraced our previous course, that is as far as Payo Obispo, capital of Quintana Roo, where with great difficulty and after much shrewd bargaining by Spinden we arranged for mules to meet us at the head of Lake Bacalar.

Then we pointed the schooner westward to the mouth of the Rio Hondo less than a mile from Payo Obispo. We grazed the river bar, in fact hung up on it an agonizing thirty seconds. Then we were in a charming scene, the antithesis of the desolate rocky coast of Yucatan with scrubby trees which we had been watching for weeks. Here were the luxuriant banks of a true tropical river, flowing in slow, deep mystery. The north bank was Mexico, the South bank the British Empire. From tall mangrove trees long trailers drank the water.

So thick was the wall of green at each side that the noise of our motors came back to us in a violent rattle. It was 5.15 when we left the mouth of the river and it was 7 when we anchored—in four fathoms. The light of a native launch blazed by us, but there was no other sign of life till morning, when the sun pierced the river mist to show us an Indian farm on the right bank a cable's length from us. We moored to a log dock before the farm house (or hut), and the tip of our bowsprit was almost over a swirl of water which marked the edge of the River Chak as it reached the River Hondo from Lake Bacalar.

At 7:30 we started up the Chak in Imp. For a mile or two this small river was narrow and deep, with little current. From there on to its head it was wider, from forty to sixty yards wide, very shoal and fast. The swift current tumbled over a sandy bottom which here and there threw up a long ridge to bake in the sun, and which harbored many stranded logs and other snags. We made very little headway, and constantly ran aground. Imagine our surprise to see a steamer approaching. It was a stern wheeler belonging to the Mexican Government, was not more than forty or fifty feet long, and was of slight enough draft, I believe, to have navigated a saucer of milk.

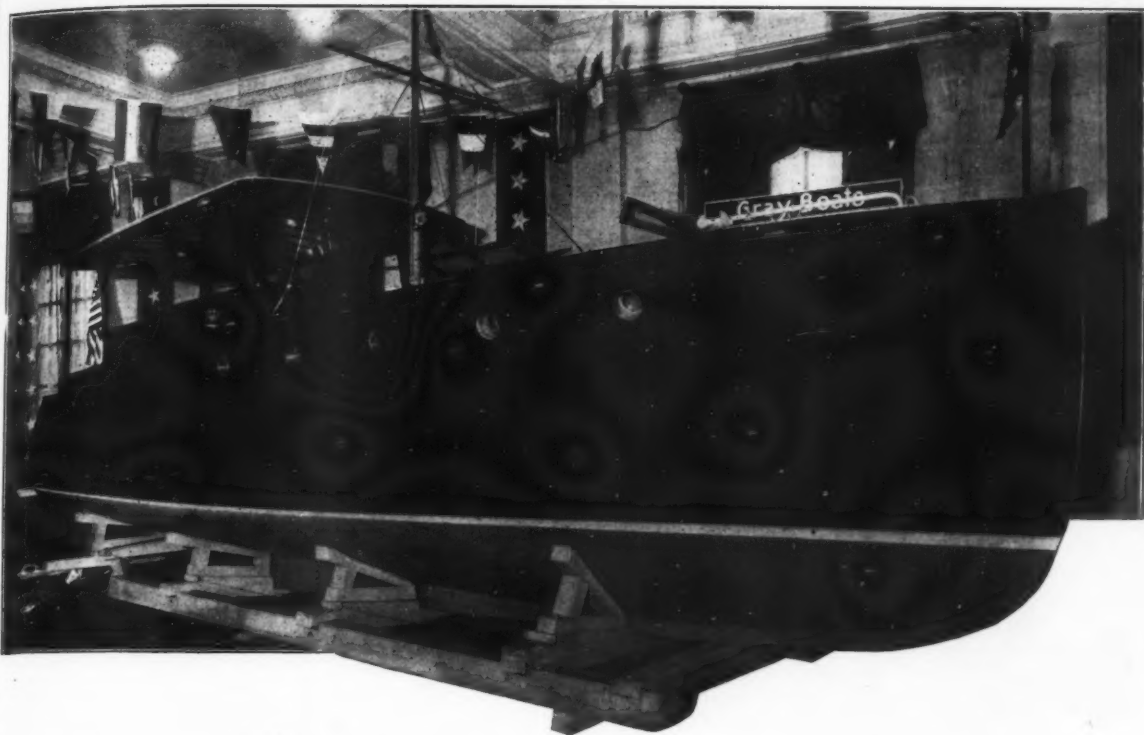
At 10.45 we reached lake Bacalar, or a branch of it. In a few minutes we were threading a sort of canal which led to the main lake, and straight ahead we could see the grey battlements of the stone fort which used to mark one of the remotest outposts of Spanish rule in the New World. We stopped to eat lunch and to look at the fort with its deep moat, and the crumbling cathedral. The only inhabitants of Bacalar today are a handful of Mexican soldiers and their women and children.

We left Bacalar at 12.45 and reached Xtocmoc (pronounced Shtocmoc) at 2.15. Here we found a chicle camp and the two muleteers who were to guide us overland on the first lap of our journey to Peto, 225 miles away—a trip never before made by an archaeological party. We arranged for them to meet us at Santa Cruz Chico, at the head of the lake, two days later, and returned to the schooner, which we did not reach until eight o'clock.

Lake Bacalar is long and narrow, some thirty miles long by a Mexican map we carried but longer than that if native statements to us were trustworthy. We did not penetrate that part of the lake which lies south of the point where the Rio Chak leaves it. Owing to the strong adverse current in the Chak we gave a day and a half to the run from the schooner to the head of the lake, a distance we estimated as being at least fifty miles, some fifteen of it through the damnable Chak.

Now I am back in civilization as I write this conclusion to the story of our expedition. It was hard that sunny morning

(Continued on page 156)



Make This Gray Cruiser Your Summer Home

Live in Luxurious Comfort as You Cruise

THERE is still time for you to enjoy living and cruising aboard this famous Gray cruiser this summer. But, you will have to decide now if you want delivery before the season gets well under way.

The completeness of its luxurious accommodations and appointments, its roominess and comfortableness are remarkably startling for a boat of its size. In this mahogany finished thirty-six footer you have sleeping accommodations for five people, two cabins, a separate galley fully furnished and lavatory with all refinements. Semi-enclosed cockpit gives full protection and unobstructed vision to helmsman. Power is furnished by the Scripps E-6, six cylinder, 65-100 H.P. marine engine giving a speed of 15 miles per hour. In workmanship, quality of materials and finish the Gray Thirty-Six reveals the fullest expression of master boat building. Price complete ready for cruising \$8,500 afloat at Thomaston, Me.

Order Now for Early Delivery

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A custom built craft built only to order. This is a handsome, comfortable and seaworthy boat for the man who wants the convenience of a large cruiser. Sleeping accommodations for 8 to 10 people. Highest standard of construction throughout. Speed 20 miles per hour, with Speedway Model M, 8 cylinder, 200 H.P. engine. Price on application.

Twenty-Eight Footer

A remarkable boat for its size; accommodates four people. The berths are 6 feet, 6 inches and the headroom is 6 feet. Powered with a Fay & Bowen 25 H.P. marine engine; speed 9 miles per hour.

Price \$3,500.00

Afloat at Thomaston, Maine

Write today for full particulars

GRAY BOATS, Thomaston, Maine

WESTERN REPRESENTATIVE: Carl R. Gray, Jr., Central Mfg. District Bank, 1112 W. 35th St., Chicago, Ill.

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

HALL-SCOTT



Performance proves HALL-SCOTT leadership!

SEASONED yachtsmen, naval architects and marine engineers know through long years of experience that Hall-Scott engines have four features of decisive supremacy . . . power . . . speed . . . reliability and economy.

After all there is nothing in a boat

HALL-SCOTT
MOTOR CAR CO.

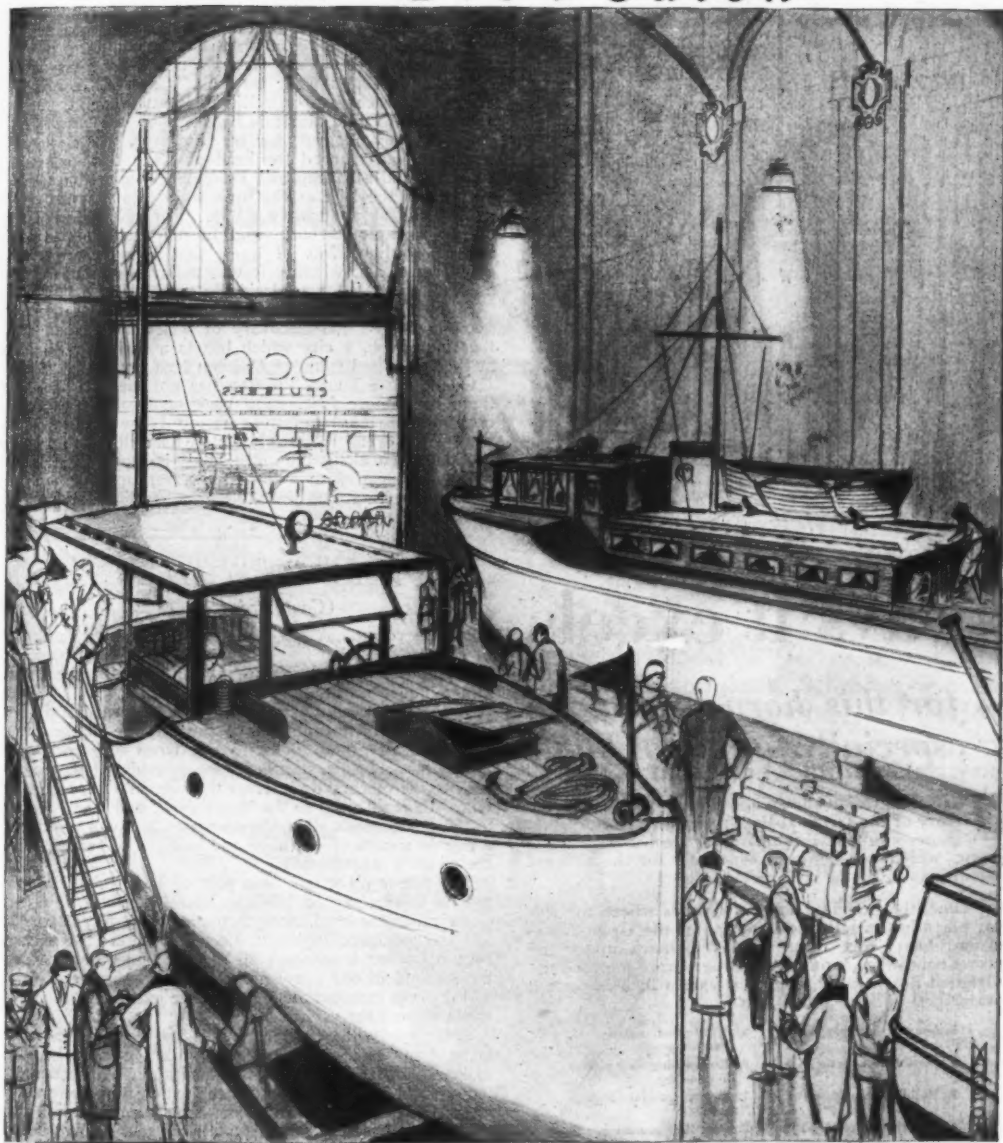
as important as the power plant. To obtain real satisfaction while operating a boat it is essential to have the most efficient engine.

Owners of boats equipped with Hall-Scott reduction gear engines have a new appreciation of smoothness and responsiveness.



217 West 57th Street
New York City

A.C.F. Salon



Where and Why . . . Yacht Connoisseurs decide . . .

STANDARDIZED cruisers and speedy runabouts are not accepted by yacht connoisseurs just because they float. With a knowledge born of experience, these men investigate factors of safety, comfort, design, engine equipment, construction, materials, finishings and furnishings.

From all parts of America they congregate at the A. C. F. Salon on Fifty-Seventh Street, New York City. Here, they can board the A. C. F. cruisers, obtaining first-hand insight into the artistry, craftsmanship and livable accommodations

incorporated in every model. Here they may inspect closely the Hall-Scott reduction gear engine.

After their critical survey, these yachtsmen admit the practicability and beauty of A. C. F. cruisers—completely furnished and ready for glorious summer cruises. Strict consideration of the advantages of A. C. F. cruisers and Super Bear Cat runabouts has brought many connoisseurs to a decision to purchase. Their early orders assure an early Spring delivery.

AMERICAN CAR AND FOUNDRY COMPANY, 217 West 57th Street, New York City

DISTRICT REPRESENTATIVES: Miami, Florida—C. T. Chenevert, 615 First National Bank Bldg.
West Palm Beach, Florida—C. P. Whitney, care of Bryant & Gray. Chicago, Ill.—Ward A. Robinson, 58 E. Washington St. Detroit, Mich.—Chenevert & Co., 324 Ford Bldg.
A. C. F. Cruiser designed by Eldridge-McInnes, Inc., Naval Architects

When writing please mention MOTOR BOATING, 119 West 40th Street, New York



~ for this horn was made
especially for motor boats

THE illustration shown above gives you the inside story of the Original-Bosch *marine-type* horn. It shows you the incomparable mechanism of this horn, which was designed especially for the unusual conditions of motor boat service.

On the Atlantic and Pacific seaboards where the salt air plays havoc with most horns, on the Great Lakes where heavy fogs come up—everywhere under the worst conditions, motor boat owners have adopted the Original-Bosch horn because it excels in 8 important ways:

1. Long-lived dependability
2. Instantaneous action
3. No lubrication required
4. No adjusting required
5. Wind-proof, water-proof, weather-proof
6. Far-reaching tone pierces heaviest fog
7. Smart, graceful appearance
8. Long-time guarantee

The Original-Bosch horn is made of brass with beautiful baked-enamel finish. If you have ever had on your boat any other Original-Bosch equipment, such as magnetos and spark plugs, you will know the kind of stamina you can expect from this Original-Bosch horn. Robert Bosch Magneto Co., Inc., 115-A West 64th Street, New York.

The Original
Bosch

ROBERT BOSCH MAGNETO CO., INC.

No connection whatsoever with American Bosch Magneto Corp.



The full name **ROBERT BOSCH** and this trademark appear on all Original-Bosch products—your guaranty of Original-Bosch quality as known the world over since 1887

Advertising Index will be found on page 206

Ruined Cities and Rare Birds

(Continued from page 152)

of Friday, March 5, to say good bye to infallible Gough and his good boys. And harder still to say good-bye to the good Albert. We still knew she was not a beauty, but she had been ideal for this trip. She had scraped reefs, plowed mud banks, bucked northers and come through. A good sea and mud boat. No one contemplating a similar trip could go far wrong in chartering Albert. And Gough's terms are reasonable, \$800 a month and fuel is what we paid. Captain George Gough can always be reached at Oak Ridge, Ruatan Island, Honduras, and I am glad to give him this boost.

The hardest moment for me, however, was perhaps that one when we had reached the head of Lake Bacalar, unloaded our baggage, and saw Imp and Delirium Tremens disappearing forever down the lake as the invaluable Johnsons drove the empty little boats at a surprising clip. For ahead lay 225 miles of mostly unexplored bush, and in my weakened condition they loomed up like 2500. I knew that Spinden was in none too good shape, and whether it was malaria, quinine or sun (probably all three!) I was decidedly wobbly.

Still we made it, and rounded out the tale of the expedition's good luck with the discovery of a seventh ruined city deep in the thick bush, a city which boasts a higher pyramid than any at the celebrated ruins of Chichen Itza or Uxmal.

One thing I now, Yucatan has got me for life. And could there be a more fascinating vacation than one which combines cruising with exploration (vacation I say advisedly though we were busy every minute)? There is still much exploration to be done even along the coast, and the possibility should appeal to a yachtsman with a flare for adventure. If such a one has a vacant berth for a deckhand or a scullion I trust I may hear from him!

3,000 H.P. in a Diesel Yacht

(Continued from page 27)

lounging room. A deck shelter is provided in the after end of this house. On the upper deck or bridge deck we have a small house, divided into a wheel house in the forward part and a chart room in the after part.

A feature in connection with the design of this boat is the fact that it is not necessary for anyone aboard the ship at any time to go on deck to get from one part of the ship to another. Inside stairways are provided from the forecabin deck to the officers' deck, from the officers' deck to the main deck, from the main deck to the upper deck, and from the upper deck to the bridge deck. Outside staircases are also provided, forming a double means of entrance and exit. The same is also true of the owner's quarters aft.

The power plant will be a pair of 1,500 h. p. Bessemer Diesel motors with a pair of 100 k.w. Diesel generators. There will be electric heating appliances throughout the boat, large cold storage and refrigerating plant, electric windless for anchor, electric boat hoist for boats, and all of the modern appliances that we have found in our previous yachts have been practical and have added to the comfort and convenience of the owner and his guests while aboard the yacht.

This yacht will be equipped with Sperry Gyro stabilizer, Sperry Gyro compass, Sperry automatic pilot, commonly called Meta Mike, Radio Corporation of America radio direction finder, and many other mechanical appliances which the Gielow organization have thoroughly investigated, experimented with, and found thoroughly practical, and suitable for marine work.

New Chris Craft Dealers

In order to assist in the distribution of the Chris Craft 26 and 22 foot runabouts, Arthur J. Utz, the National Sales Office Manager in New York, has appointed a number of new dealers in various boating centers. On the St. Lawrence, George L. Mercier, head of the Thousand Island Boat Agency at Clayton, N. Y., will handle the Chris Craft in his section. He reports that the Thousand Islands are coming back very strong as a boating center. At Bar Harbor, Maine, F. B. Hayes will sell and service the many Chris Craft already on the Maine coast together with many additional ones which have been ordered. On Lake George, New York, Walter Harris, has ordered a 40 mile demonstrator and will be able to take care of his plans after their boats have been received. This connection should increase the present fleet of Chris Craft on Lake George very materially. At the Weirs, New Hampshire, George Varney has been appointed representative for these boats on Lake Winnepesaukee. Several new boats are already on order, and will stimulate fast boating on this beautiful lake very materially.

80% of Marine Motors

exhibited at the 1927 Show were equipped with SCHEBLER Carburetors.

Schebler superiority for marine service is clearly demonstrated by the remarkable predominance of its products on motor boats everywhere.

America's Standard

SCHEBLER CARBURETORS have become America's Standard—yes, actually, the world's standard—for Marine service because they give the finest performance results, and because they are durable and trouble free under the difficult conditions in motor boat service.

There is a Schebler Model for every size and type of engine. Probably 80 per cent of all motor boats in service have Schebler Carburetors—and almost as many of all new motor boat engines are Schebler equipped when they go into service.

You can not find more convincing evidence of Schebler superiority than this striking leadership in choice by manufacturers and boat owners.

There are many boat owners who would profit by changing

their present carburetors to the latest Schebler recommended for their motors by Schebler engineers.

From the new Vertical De Luxe Schebler for small, high speed engines, to the New Schebler Model "S" for extreme flexibility of engine performance, Scheblers win in motor boating because of improved performance. Scheblers give easy starting—maximum gasoline economy—and long trouble free service. Schebler marine models have brass castings and

parts throughout, and special rust-proofing of important parts, to insure long life in motor boat service.

Get the latest Schebler—and have the best carburetion. If you can't locate a Schebler Dealer easily, write to us.



WHEELER-SCHEBLER CARBURETOR COMPANY
INDIANAPOLIS

SCHEBLER

'REG. U. S. PAT. OFF.'

THE WORLD'S FINEST CARBURETORS

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

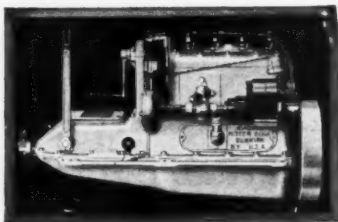
Niagara Superior Marine Engines

The New Niagaras Will Surprise You!

With convenience and completeness that will command your respect. It is conceded and hundreds of NIAGARA users tell us that never was a more faithful and reliable power plant made.

THE NIAGARA
4 Cyl. 12-15 H.P.
"SPECIAL"

MORE SPEED—LESS
COST—LONGER LIFE
— LESS UPKEEP —
SMOOTH — SMART
— QUIET.



TRUSTWORTHY

Here are engines that make motor-boating a real pleasure and stretch your dollar. Engines that stand up.

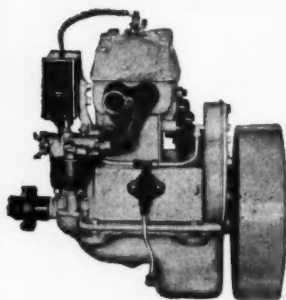
\$110 Niagara 5 H.P., 1 cyl.
4 cycle, "Gem."

The most inboard engine for the money today.

**BOAT OWNERS AND
DEALERS!**

Write for free details
(State HP interested)

Niagara Motors Corporation
Box 888, Dunkirk, N. Y.



SOLARINE Cleans Quickly

And Protects Metal Against Elements

You can put a lasting lustre to the brass on your boat more quickly with Solarine and with greater ease than with any other metal polish. Don't take our word for it. See for yourself—and at our expense. Send coupon below today for a large sample can, absolutely free.

Solarine contains no ammonia, hence metal polished with Solarine does not tarnish quickly. Solarine places an outer film of protection on metal that defies the elements. A Solarine polish is practically impervious to salt air and spray.

And Solarine requires less time and much less "elbow grease." It is quick, efficient and economical. Send coupon today for liberal free sample.

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Mail This Coupon NOW!

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Please send me, free and without obligation,
your large sample can of Solarine.

Name

Number

City State



**FREE—
Liberal Sample
Mail Coupon Now**

Outboard Speeds Have Doubled

(Continued from page 41)

then called the Johnson 5 h. p. model, presented an opportunity to try out various types of boats that were assembled for the races. These tests showed very conclusively that the high speed motor belonged with the hydroplane and not with the displacement type of boat. In view of the results shown it is difficult to understand why this point is so consistently ignored. It was due to this lack of consideration that many of the new motors were unable to show their speed possibilities because they were applied to boats to which they were entirely unsuited. It does not seem possible that several thousand men would attempt to go boating with their anchor dragging, yet fully that many deliberately used high speed motors on slow displacement boats, and were proud of their choice.

The early days also showed plainly that there were two lines of development. First, a strictly racing craft, and then essentially utility boats. This difference in type has since tended to increase. Among the earliest of the more distinctly racing craft was the Baby Buzz type. With the larger motors available, a new type of boat had to be developed, and this class proved to be quite acceptable and large numbers of them were built. The Baby Buzz class was in effect a monoplane type of hull which was modified in the forward sections to a Vee type, and proved to be quite fast. The normal speed would be in the neighborhood of 17 miles with this type of hull and the large engines. The more recent development of this class shows it to be in a transition period, and undergoing a gradual change to a more useful type of boat with more substantial construction. It seems that the heavier construction has had but very slight effect on the speed of these boats. As an out and out racing craft, the Baby Buzz class has been supplanted by still faster models. In fact competition in 1927 has already shown speeds over 25 miles, and it is very evident that these high speeds require special hulls.

During the development period of the Baby Buzz class, it was much in the fore ground but by no means alone in the high speed field. Many new models were developed, which were splendidly suited for fast every day service. The greater part of these boats were of the full length Vee bottom type, with the keel carried below the line of the chine, all the way to the transom. These were somewhat slower than the Baby Buzz type, with a light load, but when there were two or three passengers to be carried, they were slightly superior in rougher water.

Early in 1926 the outboard motor situation was further complicated by the announcement of several additional motors which were referred to as 4 h.p. machines, while the newer model of the Johnson Company was increased to 6 h.p. The smaller engines were of the same size and weight, although slightly different in piston displacement. It was still too early to predict what these engines were capable of, and it is doubtful whether the manufacturers were fully familiar with the possibilities of the engines. On receiving these new machines, tests were undertaken with all three, so that a definite idea of their comparative possibilities was obtained. At the time all of the engines seemed to be somewhat disappointing, as they were unexpectedly stiff, and refused to show any semblance of speed. This together with the discomfort of dodging floating ice in the early spring can now be looked back upon with much amusement. After much running, the engines began to limber up, and by early April were showing consistent results. No attempts were made to establish maximum speeds, as the data wanted was the service speed with various types of boats.

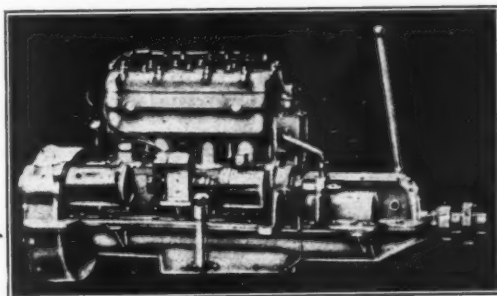
The results of the experiments developed that the difference between the two 4 h.p. engines, was that one would cause a boat to plane, while the other would not. This was due to a difference in revolutions, or perhaps more precisely a difference in design. Comparing these machines to the better understood inboard engines, one might have been classified as a heavy duty type, while the other would fall in the high speed class. In the application of the engines to boats it was found that there was no important difference between the high speed 4 and the high speed 6 h.p. engines. Since this statement might be misconstrued let me explain, that this is merely a difference of function, and not a comparison of the engines. Perhaps the point can be made clear by noting the difference between a portable electric drill, and a screw driver or grinder. One must have a high rate of revolution, while the other has a comparatively low rotative speed. The efficiency of one is no reflection on the efficiency of the other. Still, in selecting either tool, it is important to know the purpose for which it is to be used. The same line of reasoning will apply to the choice of engines and boats. In any event, a heavy duty motor on a boat which is intended to plane, and a high speed motor on the ordinary dis-

(Continued on page 162)

BRENNAN

For Genuine Satisfaction

A Brennan
For Every Type
of Craft
18 to 75 feet
in Length



15 H.P. to 200 H.P.
Four and Six
Cylinders

1129 Clay St.,
Oakland, Calif.

BRENNAN MOTOR MFG. CO.,
Syracuse, N. Y.
Gentlemen:

With reference to the BRENNAN 4-cylinder 25-35 H.P. motor installed in our 31' x 8' sport Cruiser.

We desire to say that the motor is very satisfactory giving us a speed of 15 m.p.h. with no vibration. We anticipate making many pleasant trips about here this winter as there is no closed season for boats here.

Yours very truly,

CLARKE BROTHERS
(Signed) F. S. Clarke

BRENNAN MODEL E-4

Medium Duty, 35 H.P. at 1000 R.P.M.
High Speed, 50 H.P. at 1600 R.P.M.
Bore $4\frac{1}{2}$ in. Stroke 5 in.
Full 100% Reverse Speed



Clarke Brothers' 31-ft. Cruiser powered
with a BRENNAN E-4.

PEARSON & SAUVE & TAYLOR
YACHT BUILDERS & DESIGNERS
HAVRE DE GRACE, MD.

BRENNAN MOTOR MFG. CO.,
Syracuse, N. Y.
Gentlemen:

I am in Elizabeth City, having left Havre De Grace about three weeks ago on my annual cruise. The two motors which I have in my Cruiser have given the utmost satisfaction.

We have gone nearly 400 miles and they have never missed an explosion. Had one run of ten hours straight.

The Captain of the boat "Mina K" owned by a club of wealthy Pittsburgh men is very much interested in a pair of your motors.

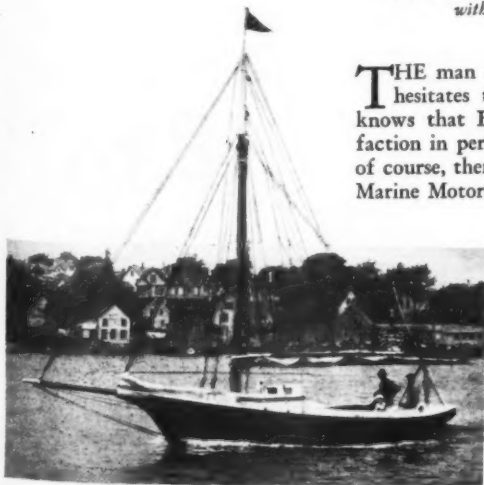
Yours very truly,

(Signed) Edwin Pearson

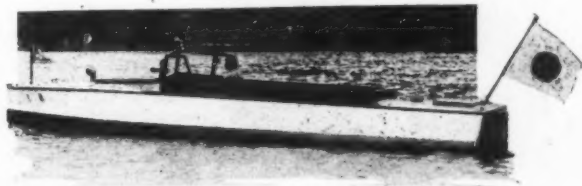
Owner of a 50' cruiser powered
with two BRENNAN E-4's

THE man who is thoroughly familiar with all makes of marine engines never hesitates to buy a BRENNAN as power for any type of boat, because he knows that BRENNAN design, workmanship and quality insure genuine satisfaction in performance, besides savings in maintenance and operating costs. And, of course, there's the full 100% reverse speed which is standard on all BRENNAN Marine Motors.

BRENNAN prices are interestingly low.
Let us send you a catalog. Write today.



J. E. Robinson, of Vinalhaven, Maine, owns this 35-ft.
sloop powered with a 4-cylinder BRENNAN.



Yone, a 30-ft. runabout powered with a BRENNAN E-4,
owned by R. Kawasaki & Co., Kobe, Japan. Speed 24
miles per hour.

BRENNAN MOTOR COMPANY

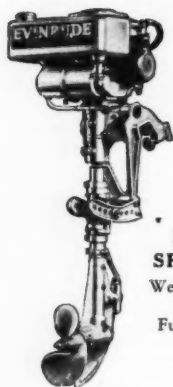
500 E. Water Street, Syracuse, New York

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

123% Ahead!



**Evinrude
FASTWIN**
Weight only 49
pounds.
Full 4-H.P.



**Evinrude
SPORTWIN**
Weight only 44
pounds.
Full 2½-H.P.

Three New "Twin" Motors Three New Services

MORE twin-cylinder Evinrudes were sold last year than in any previous year in history, including 1916, when Evinrude introduced the first successful twin.

Only two months ago, Evinrude announced the three sensational new 1927 models shown here. Only a month ago Evinrude published its three remarkable new services—its **FREE TRIAL GUARANTEE**, **STANDARDIZED TIME-PAYMENT PLAN** and **BOAT-SPEED GUIDE** (Reg. U. S. Pat. Office). Never, in all marine motor history, have such guarantees of satisfaction been offered.

Bona fide orders at this writing exceed those at the same time last year by 123%. This recognition surpasses by an almost unbelievable margin, all previous sales gains in our entire 17 years of Evinrude manufacture.

Write for free copy of new 40-page Evinrude Year Book. Motors in actual colors. Shows beautiful waterways, speed records—complete facts!

EVINRUDE MOTOR COMPANY

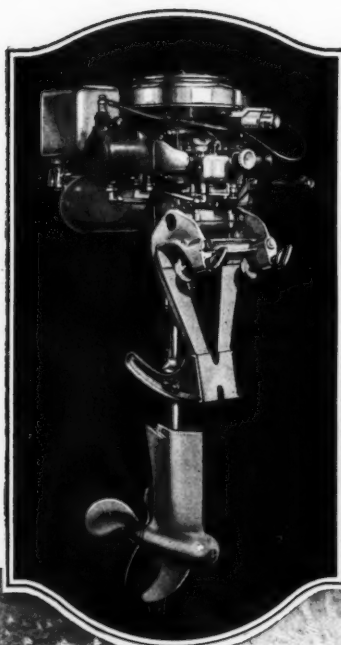
1103 27th St., Milwaukee, Wis.

FACTORY BRANCHES—SALES AND SERVICE:

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New York City, 115 E. 23rd St.
Boston, Mass., 239 Atlantic Ave.
Oakland, Calif., 117-119 Broadway.
Portland, Oregon, 124 Second St.

Seattle, Wash., 79 Columbia St.
Minneapolis, Minn., 312 2nd Ave. S.
Detroit, Mich., 434 Shelby St.
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See Our Exhibit at the Outdoor Show Coliseum,
Chicago, May 9 to 14



**Evinrude
SPEEDI-
TWIN**

Weight only 75
pounds.
Full 8-H.P.

Pacific Coast Champion in
1926
Evinrude Big Twin with
"Skip" shown below, won the
free-for-all in the Fourth An-
nual Pacific Coast Cham-
pionship in 1926. Finished 2
minutes 42 seconds ahead of
next boat of similar design
over 5-mile course.
Evinrude is also champion of
the Northwest Coast Regatta,
Seattle, 1926.

\$30
Puts
Any Model
EVINRUDE
in Your Boat





EVINRUDE WINS At San Diego and Mobile!

26-2/25 Miles per Hour in Rough Water
(Preliminary Unofficial Time Trial)

NOTE: The following two victories are more than just impressive, for in both races only ONE stock model Evinrude Speeditwin was entered against the field.

Evinrude Motor Co.,
Milwaukee, Wis.

San Diego, Calif.
Feb. 27, 1927.

Speeditwin won today by a lap. Beat and
In an unofficial time trial yesterday on a measured course, Vermaas made a mile in two minutes and eighteen seconds on rough water timed by stop watch. Speed 26-2/25 Miles per Hour.

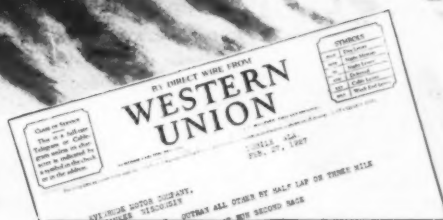
H. G. GRAVES.

And Again by Half a Lap over 3 Mile Course!

Evinrude Motor Co.,
Milwaukee, Wis.

Mobile, Ala.,
Feb. 27, 1927.

Took first place. Outran all others by half lap on three-mile course. Other motors would not run second race.
M. L. MEYER.



CHICAGO MILWAUKEE AND LAKE SUPERIOR TELEGRAPH COMPANY
POSTAL TELEGRAPH - COMMERCIAL CABLE

TELEGRAM

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RE: _____

DATE: _____ TIME: _____

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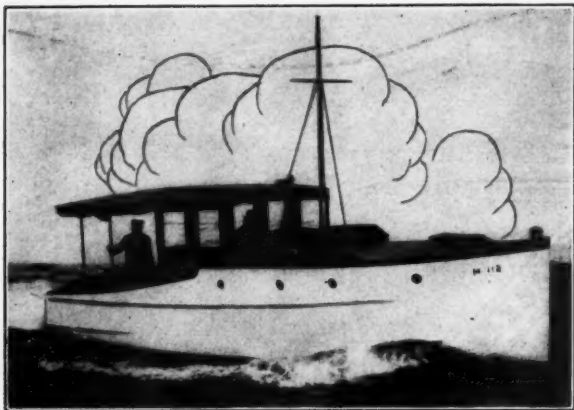
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NOTE: This is an abbreviated listing of boats and maximum speeds. Ask for Evinrude Year Book showing additional standard type hulls with speeds complete for all. Trolling speeds as low as 2 M.P.H.

EVINRUDE BOAT-SPEED GUIDE (© 1927)

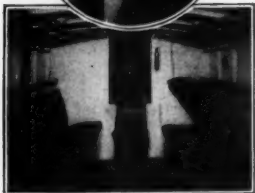
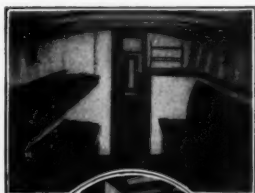
Note: This is an abbreviated listing of boats and maximum speeds. Ask for Evinrude Year Book showing additional standard type hulls with speeds complete for all. Trolling speeds as low as 2 M.P.H.

Type of Boat	Speeditwin	Fastwin	Sportwin	Sinle	Inboard Twin
1 or 2 Occupants					
Racing Hydroplanes	15-27	11-23	9-13	6-9	8-15
9'-14' Long	12-20	10-18	6-11	6-8	Pointed Stern 7-12
Square Stern Canoes	10-18	9-16	5-9	5-7	5-10
16-20 feet long	9-15	6-11			
Light Round or V Bot.					
12' to 18' Boats					
Heavy Round or V Bot.					
Bottom Fishing Boats					
12 to 18 feet long					



MARCO CRUISER

*Gives You Every Convenience
for
Living Afloat and Distant Cruising*



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Outboard Speeds Have Doubled

(Continued from page 158)

placement row boat, do not make a seaworthy combination. In one case the transom is so far out of the water that the motor does not give sufficient control in turning, while in the other the entire boat is overloaded, so that there is danger of water coming over the side. In either event the conditions impose an unnecessary strain on the helmsmen, which rob the sport of any semblance of pleasure.

In Flushing, where we do our boating, we have an unusually accurate course, together with a straight channel along the breakwater, with Government markers at definite stations. All other conditions however, are not so good, since the tide, the wind, and the commercial traffic, make small boat handling difficult most of the time. The point is mentioned to bring out the contrast with inland boating. On the smaller lakes there are no problems of traffic, or sea, or tide. Under ordinary conditions if the day is too stormy, and the water rough, the boat is not taken out, and the owner amuses himself in other ways. Rough water is rough no matter where you get it, but the conditions under which we must do our boating are much more severe than would be selected by the average outboard motor driver for pleasure work. It is quite possible therefore, that my standard of seaworthiness is stricter than is required.

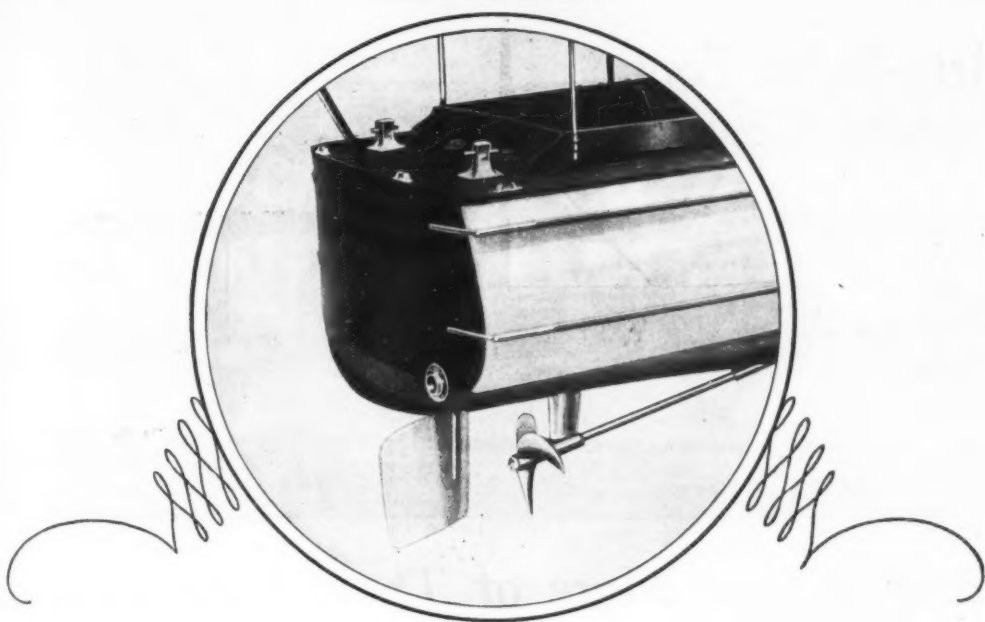
The greater part of the months in the early summer of 1925 were used in testing and comparing all available models, and a fairly clear idea of what could be expected from each was obtained. We learned that while the new motors could plane, we were nevertheless using a type of boat designed for quite different conditions. Prior to this time, all planing had been complicated by the need of first getting a considerable load into the required position. Due to the lighter boats which we were using, we were in a position to study the planing effect from a somewhat new angle. To be exact we could, and for the first time did, approach the problem entirely with reference to the water under the boat. Obviously a boat which rides on the surface of the water is mostly concerned with the effect the hull has on the water in a vertical up and down plane, and not so much with the action in a horizontal or sideways plane.

Our results shortly convinced us that we were in a peculiar position. We had come through the season with increasing enthusiasm for the boats which were grouped under the general heading of Vee bottom design. Suddenly it appeared that the Vee had very little to do with the results we had been getting. This was a little hard to understand for our boats did not have weight enough forward to hold the Vee down long enough for it to have any effect, and obviously we must be getting the planing which resulted in some other way. It is only necessary to refer back a year or so to the stories of the races during 1925, and you will find that in almost all cases the bow section with the Vee is entirely out of water, and particularly when starting up and getting up to speed, the Vee seemed to be entirely useless. There is no way in which the planing action can be associated with the Vee feature of the designs. It was pointed out that many of these little boats planed only with a light load, and with a greater load they were really displacement boats, in which case the shaped bow was needed to ease the entrance into the water. It does not follow, however, that the Vee bow is necessary for this, nor does the action of the boat when not planing lead us to any definite conclusion. The easiest way to determine whether our theories were correct was to make some experiments.

It was decided to build a boat in general similar to the Baby Buzz type, but without the Vee forward. On further thought it was decided to build still another with the bow portion left off entirely. As these boats were merely experimental hulls, no pains were taken to turn out a high class boat, and in fact with the second one, a set of boxes was made so that it could be tried out as a step plane or in various other combinations. This boat was christened Baby Carriage, while the longer one was called Miss Carrie. Wherever these boats appeared, they furnished much amusement, so that it was finally decided to take them to some of the races, and as a result they were painted and named. Since on the little boat there wasn't room enough for a long name like Baby Carriage, this was abbreviated in English fashion and became Pram. In the first race in which these boats took part, they were never more than ten feet apart. Later another boat called Go-Cart was added to the fleet. Pram required a definite pressure forward to make it plane. Go-Cart on the contrary like Carrie, had been fitted with squat boards, and these, not only permitted her to plane more quickly, but actually added to the speed.

The question was frequently asked why the L-A motor was used in these tests instead of the larger Johnson, and perhaps it is well to explain this now, especially since the same reasoning still applies to the larger motors of today. The larger engines involved not merely a greater weight, but it meant carrying this weight considerably higher. Not knowing how these strange

(Continued on page 168)



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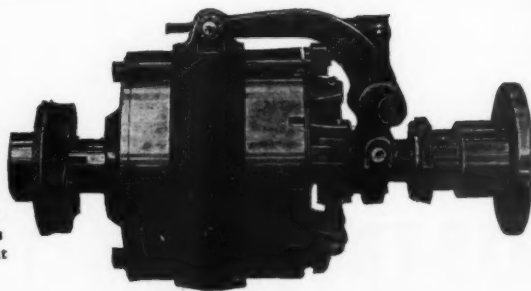
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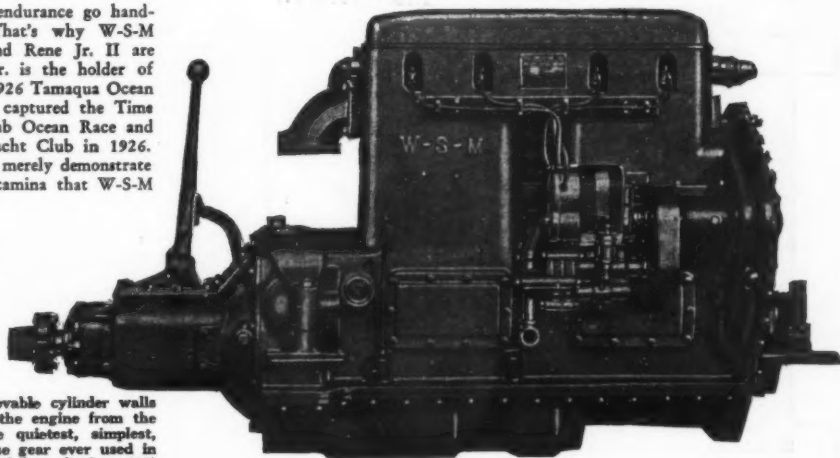
Rene Jr., powered with a W-S-M 60 H.P. marine engine, won two of the most important cruiser races of 1926, the James Craig Trophy race from Philadelphia to New York and the Tamaqua Ocean Race.

Rene Jr., and Rene Jr. II, Powered with W-S-M Engines Are Holders of Coveted Trophies

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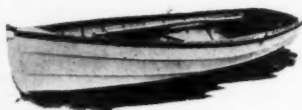
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Outboard Speeds Have Doubled

(Continued from page 162)

boats would act, we preferred the lesser risk of a lower center of gravity, and it is pleasing to note that after a full season of use in which these boats were handled by all sorts of drivers and in all sorts of weather, there was not a single upset. Discretion in this matter certainly proved its value.

With the possible exception of the stepped plane, these three experimental hulls were decidedly faster than anything available up to that time. Carrie was the most dependable of the smaller boats, and had a peculiar action which seemed to indicate that there might be some advantage in having the bow of the boat touch the water, for Carrie travelled on 11 of her 13 feet, or at least seemed to as far as could be determined. Experiments were continued with slight variations in hull design until we were reasonably sure we were getting all the speed possible from the engines. Without going into detail, concerning all of the countless changes which were tried out, the final Baby Carriage was 8 feet long and 51 inches wide for its entire length. There are four inch squat boards on the bottom, protected by a similar extension of the sides, with sections forward which were pronouncedly concave. The keel was highest amidship, and drooped slightly toward both ends of the boat, and to the chines.

A Baby Buzz boat in action will show the straight section, striking the water at such an angle that a certain amount is thrown forward under the boat. While this seems to blow out at the sides in a harmless fashion, it is apparent that it causes a decided and certain waste of energy. The final design of Baby Carriage, as far as can be determined, does not disturb the water in the slightest, but simply rides on its surface.

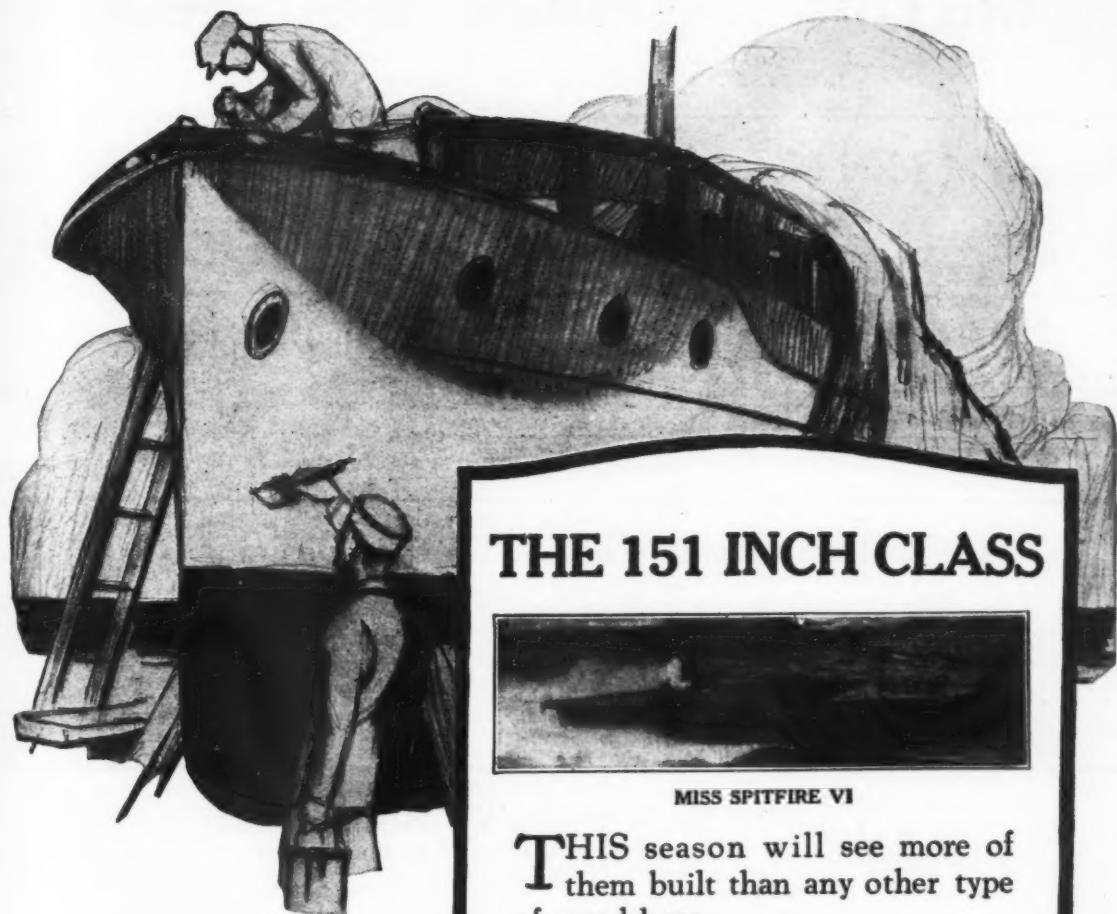
The next problem encountered was the application of what had been learned to a practical hull for ordinary service. We knew that the entering lines of a boat could be improved by striking the water with a plane that inclined upward. We knew that better steering way resulted from a decided Vee at the transom. What was not known was the effect of combining these two features in a single boat. The result was simple enough, for not only did we get the advantage of the two characteristic shapes, but we secured a balance between the two riding surfaces. This form of hull was termed Bi*plane, and in action strikes the water well forward, with practically no disturbance. A slight increase in the speed, or a wave simply rolls the point of contact a few inches further back, whereupon the after riding surface lifts and straightens the boat out again. There is therefore, no tendency either to lift the bow when getting under way, or to pound in rough going. The weight in the boat is distributed well towards both ends, with support along the entire keel. The strain of carrying the entire load over a small area, and the even greater strain of striking the water at speed at an abrupt angle, are both eliminated.

Since the Bi*Plane design refers only to the bottom lines of the boat and involves no particular structural problems it is capable of wide development. The first model was little more than a box with this special bottom securely fastened in place. In fact, the first one was not very securely fastened, and the need of having the desired shape well built into the frame was quickly discovered. Since this time various boat builders have constructed boats to these lines, with results that have been not merely satisfactory, but almost exactly what we were prepared to expect in the way of speed, stability, and other good points. There still remains much to be learned about the various details involved, more particularly about the relation of the exact lines of the keel to varying power. Our tests have gone far enough to convince us that better results are being obtained by shaping the bottom of the boat, and balancing the load.

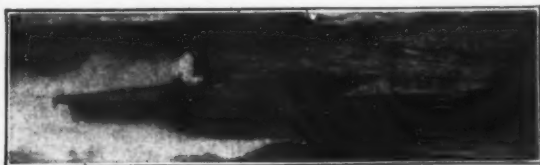
As far as we have gone at this time, we have found the essentials of the Bi*Plane design to be: A chine line which rises one inch in a distance of three feet forward of the transom, then dropping not quite an inch in the next three feet, and from this point continuing level until it begins to swing upward to meet the stem. The keel line is an inch or slightly more below the chine at the transom, and rises to be level with it at a point three feet forward. It continues to rise to a point about two inches above the chine amidship, and then drops again to be level with the chine about twelve feet from the transom. Squat boards, or what might be termed a continuation of the bottom boards extend four inches beyond the transom, and are eighteen inches wide. The lower side board of the hull proper is also extended four inches, in order to protect the bottom. The function of the bow is taken by the underbody of the boat forward of amidship. The actual bow therefore is largely a matter of appearance, and boats which have been built varied from 15 to 15½ feet merely because of the differences in finishing the box.

The nature of the design suggests two developments. Thus far we have concentrated on a utility model of substantial construction without sacrifice of speed. Since a boat of 300 pounds

(Continued on page 172)



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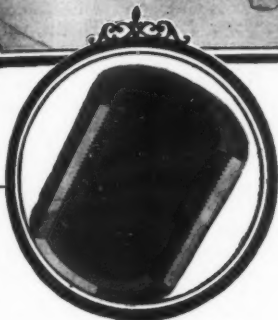
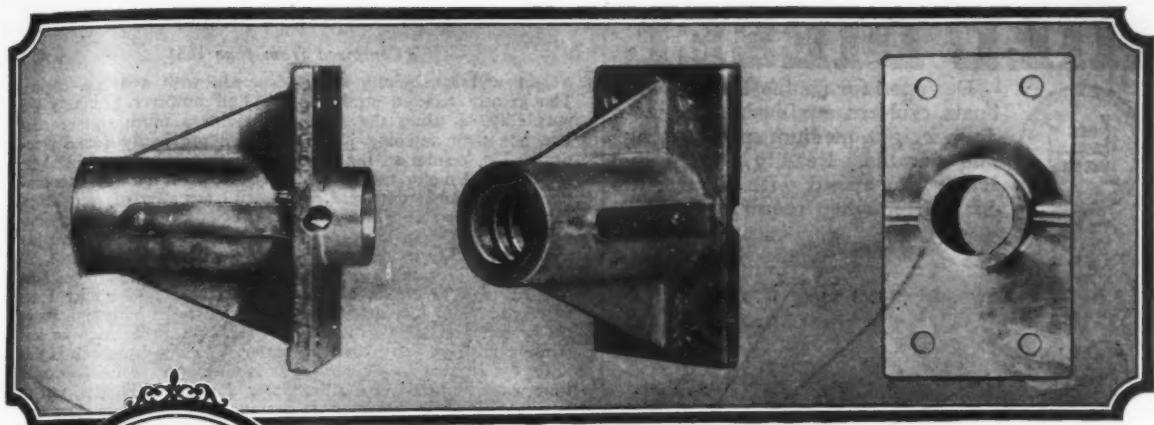
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Akron, Ohio

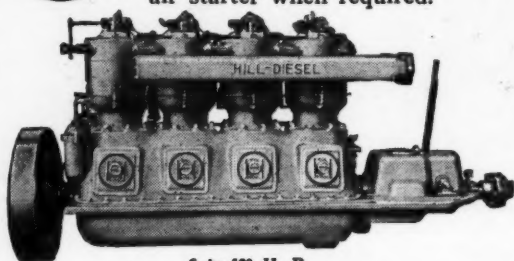
Goodrich Cutless Bearings

—for stern tubes and struts

HILL DIESEL



Designed for fishing boats, work boats, cruisers, auxiliaries, etc., medium weight, medium speed, strong and durable. Readily started by hand. Furnished with electric or air starter when required.



6 to 120 H. P.

(Write for Bulletin No. 31)

In this Engine we have combined all the good features developed by our twenty years' experience manufacturing internal combustion engines.

Hill Diesels are the only small Engines meeting all of the demands, such as Cold-starting, Continuous Service, Speed Control, all mechanism easily understood and requiring little attention.

Lowest fuel consumption per Horse Power hour.

HILL DIESEL ENGINE COMPANY
(Cable BEMCO) LANSING, MICHIGAN

Outboard Speeds Have Doubled

(Continued from page 168)

weight will consistently show 16 m.p.h. with a 4 h.p. engine. The greatly reduced strain on the hull however, suggests the possibility of using the same lines with a much lighter construction than anything which has been previously found practical. The results so far have shown that a better riding boat for outboard motor use has been produced. What other applications may result from these lines is still a matter of speculation. From the response which boat builders have made to these improved lines it seems that the roller bearing boat as some one has termed it, will be in general use during the coming season.

Perhaps the simplest description of the Bi*Plane type of boat is, that it rides on an even keel, it contrasts to earlier boats developed from fast models which first lift the bow high above the water, and later gradually settle down to a more or less straight position just above the water. The big drawback in this latter type is that the driver's view is obstructed at the particular time when he needs to see the water the most. That is, just as he is starting out or coming to a stop. The Bi*Plane rides constantly on a bearing more than 10 feet in length, and when it lifts, the entire boat rises. In rough water or smooth, at low speed or high, the boat is in balance and requires no thought or skill on the part of the driver to handle it.

151 Hydros Break Record

(Continued from page 44)

to Boyce's exertions and spectators saw him crawling under the wing on his way aft. No one blamed him for not jumping overboard with the Spitfire going as she was, but there was a grave question as to just how long he'd be able to stay aboard as there did not seem to be anything much to hang onto except Hammond's neck.

As the little craft scored down to the starting line she was seen to be running beautifully. Was she a boat or an airplane? Perhaps some onlookers realized that Kipling foresaw the type many years ago when he wrote *With the Night Mail*. If Rand's contraption was not the *Bat Boat* described in the appendix to that prophetic story then what was it? Spitfire's performance was too startling, however, to give spectators much time for debating what she was. The first lap of the course was made at 47.7 miles per hour, a little better than the speed that gave the boat the Elgin Trophy and very slightly faster than her fastest lap in the regatta. The boat was now carrying two men, however, and during the races she had carried but one. On the second lap Hammond signaled that he was going to let her out. Whether or not he actually let the wonderful little Frontenac motor all out is a question but he made the second lap at 54 miles per hour. Incidentally the hull was badly damaged by the pounding resulting from the great leaps which it took when traveling at this speed in a slight harbor chop.

The accompanying drawing of the Spitfire V with the wing attached was specially made for MoToR BoatinG by the Ryan Aircraft Company. The framework of the wing is made entirely of high grade, light gauge, steel tubing. The joints are welded. The members which attach the wing to the boat are of similar construction. The wing is covered with fabric treated with the usual dope. Other data furnished by the designers of the wing are:

Wing span, 16 feet.

Chord, 3 feet.

Area, 48 square feet.

Aerofoil section, Page & Collins 5.

Angle of incidence, 4°

Lift at 50 m.p.h., 275 pounds.

Whatever effect the experiment may have on the design of future racing craft and in spite of the probable enactment of regulations against Bat Boats in motor boat racing, there can be no doubt as to Mr. Rand having contributed an original idea and both he and the Ryan Company deserve great credit for the expeditious manner in which the wing was designed and built.

Spitfire V's speed of 47.05 m.p.h. in competition as a hydroplane and 54 m.p.h. as a Bat Boat were not long to remain unchallenged. Harry Miller's Angeles I had given a most satisfactory account of herself in the San Diego races considering that she was a new boat and had not had the benefit of even a couple of days tuning up before the regatta. Five finishes out of six starts and a speed of over 43 miles per hour is remarkable for such an untried outfit. Furthermore, it was known that Miller had raced Angeles at San Diego without a supercharger on account of the price limitation on 151 class engines racing under the M.V.P.B.A. rules for 1926. When the 1927 rules came into effect and removed this limitation what would Angeles be able to do when fitted with a supercharger?

(Continued on page 176)

Cigarette IV

Winner of the President's Cup
Has Its Fuel Purified By The

BOSWORTH FILTER

Prevents
Fuel
Stoppage

Furnished
in
Any Mesh
Desired



Banishes
Fuel
Impurities

Manufactured
of
SOLID
BRASS
or
ALUMINUM

FOUR SIZES

BRASS		ALUMINUM	
No. 125— $\frac{1}{8}$ "	\$5.00	No. 125— $\frac{1}{8}$ "	\$7.50
No. 250— $\frac{1}{4}$ "	7.50	No. 250— $\frac{1}{4}$ "	11.25
No. 375— $\frac{3}{8}$ "	10.00	No. 375— $\frac{3}{8}$ "	15.00
No. 500— $\frac{1}{2}$ "	20.00	No. 500— $\frac{1}{2}$ "	25.00

Write today for further particulars.

Bosworth Filter Company, Inc.
15 Wilbur Avenue, Long Island City, N. Y.

Monel Metal Shafts

Standard in Dodge "Watercars"



George F. Crouch gives six good reasons for using Monel Metal Propeller Shafts

IN standardizing on Monel Metal shafts for its famous "Watercars," the Horace E. Dodge Boat Works was guided by previous experience with Monel Metal. Summarizing the reasons for using Monel Metal propeller shafts, Mr. Crouch, the Vice-President in charge of Engineering said:

1—"It is non-corrosive—completely non-corrosive in both fresh and salt water.

2—"In service the shaft running in bearings acquires a mirror-like surface which trebles the life of the bearings and has minimum frictional losses.

3—"It is far more rigid and has less 'whip' than other non-corrosive shafting material.

4—"It does not crystallize and become brittle with use.

Above: Standard Dodge "Watercar" fitted with Monel Metal propeller shaft. These boats are noted for comfort and absence of shaft vibration at all speeds.

5—"Monel Metal shafting meets our rigid inspection for straightness, uniformity in diameter and finish better than any other we have yet tried.

6—"It is always uniform in its physical properties and each piece is homogeneous and without internal flaws or cracks."

THE same properties that make Monel Metal so valuable for propeller shafts, also make it the ideal metal for many other marine parts and fittings. Monel Metal is available in the following shapes and forms: sheets—tubing—strip—wire rope—wood screws—nails—rivets—bolts and nuts—lag screws—etc.

Have your next boat put together with Monel Metal wood screws.

For detailed information about Monel Metal in any form, write to The International Nickel Company.

The fact that leading motor boat manufacturers, who stake their reputation and success upon the satisfactory performance of every part—the fact that these manufacturers should adopt Monel Metal shafts as standard—should suggest that you, too, can insure the dependable, smooth performance of your boat by using Monel Metal.

Monel Metal is a technically controlled Nickel-Copper alloy of high nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company. The name "Monel Metal" is a registered trade mark.



Monel

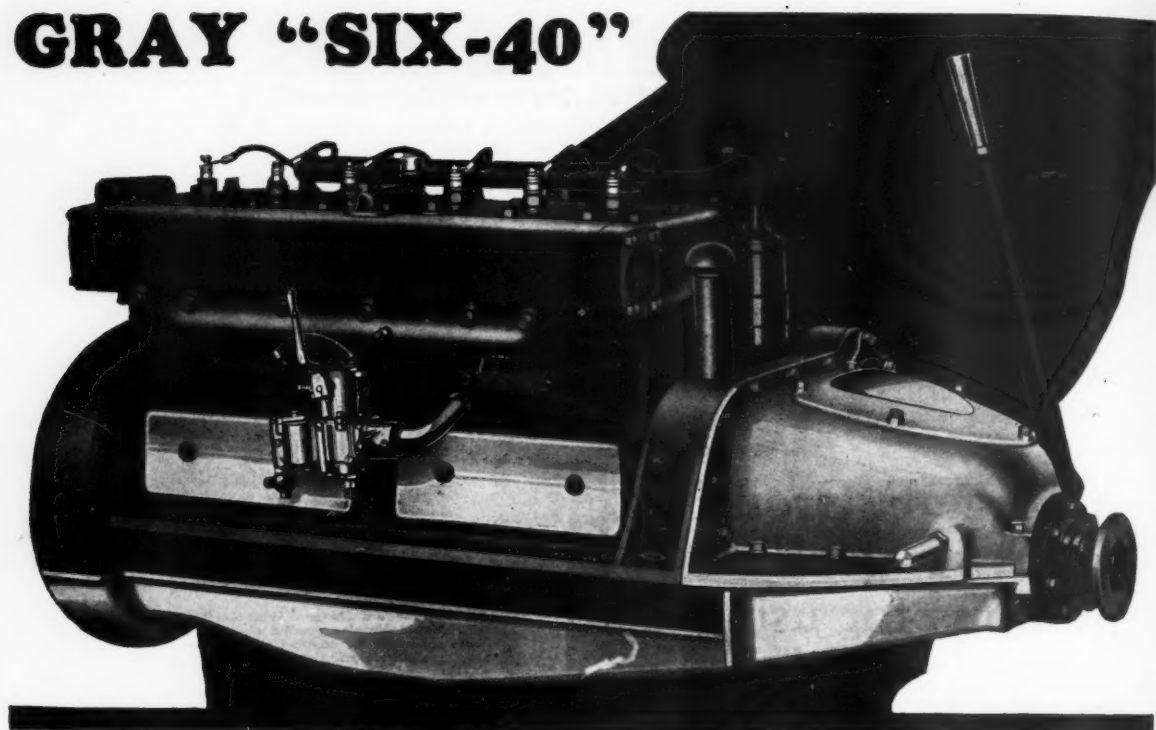
metal



THE INTERNATIONAL NICKEL COMPANY (INC.), 67 WALL STREET, NEW YORK CITY

When writing please mention MOTOR BOATING, 119 West 40th Street, New York

GRAY "SIX-40"



Amazingly Free from Vibration

Engine Vibration has been conquered! The Automotive Industry acclaims it one of the greatest engineering achievements of the year. The newly-designed sixes run with unbelievable smoothness.

Now Gray has brought to the marine field, the same engineering practices—the same fine workmanship. The result is a "Six" that is amazingly free from vibration. Here in the Gray "Six-40," we offer you a Motor that inherently—

**—at the Price
of a Good
Four**

Only

\$595

Absorbs the Shock of its Own Great Power

Tuned for action, it is a beautiful thing to see and to hear—and how smoothly and swiftly it can push a boat. It's the ideal Motor for craft requiring 30 to 40 H.P.

New Free Catalog Folder tells all about it. Write for it today.

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Gray Production Methods once more achieve the seemingly "impossible." This marvelous smooth-power *SIX* is ready for your boat at about the price of a good *Four*. Think of it! An all-enclosed 6-Cylinder Marine Engine, with all the refinements that promote economy in operation and maintenance; ease of handling, and perfection in performance—for only \$595.

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Gray Motors are recognized "Standard of Marine Power" the world over. Since 1906 they have been proving their superior qualities in all classes of service.

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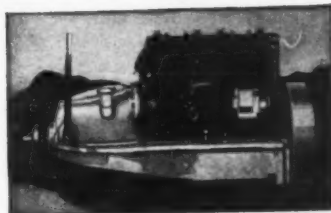
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Powered by Gray "Six-40," 3 1/4" bore, 3 1/4" stroke, 187 cubic inches, 40 H.P. in Runabouts, 30 H.P. in Cruisers. Pressure Lubrication to all bearings; Oil Sump Pump. Length, 30 in. Height above center line, 15 1/4 in. Weight, 540 lbs. Engine speeds up to 3000 R.P.M.

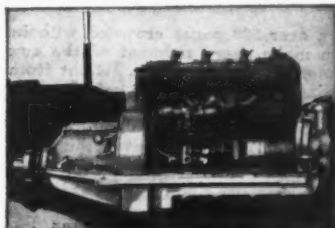


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Ask any Boat
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Owners what he
thinks of Gray
Motors.



Gray H-50—A Quality Four of extreme accessibility. Weight 500 lbs., and turns up 1800 R.P.M. 50 H.P. Price \$550 to \$820, depending on equipment. Also built in 75 H.P. at \$1100.



Gray Model Z—The lightest, shortest, cleanest and lowest price, 20 to 25 H.P. Motor in the world today—\$395 up to \$466. (Without clutch only \$270.)

Good Since 1906

Gray Power Gray Power Gray Power Gray Power

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The NEW 1927 Spring Edition of the Yachtsman's Guide The Only Complete Yachting Encyclopedia Published

Here are over 500 pages crowded with information that will help you make every moment of the coming motor boating season more joyful than ever. Right from the time you start your spring overhauling—through the entire summer—till that fall day comes again when your craft goes into winter storage—this remarkable volume will be your daily guide and companion, telling you everything you can possibly want to know. For example, the book tells you:

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151 Hydros Break Record

(Continued from page 172)

Fans did not have to wait long for the answer. On January ninth the Pacific Coast Hydroplane Association held mile trials for 151 class boats in Newport harbor and Angeles was among the entries. Other boats entered were Janet II, General, Es-mara III, and Frances Marion. An electric system and stop watches held by experienced timers were used in timing the six dashes that were made by each boat completing the event. Janet II led off the performance with six runs on which the official times reported were 1:29, 1:29, 1:34, 1:30, 1:29 and 1:29. The mean of the speeds made on the six runs was 40.05, or a fraction of a mile better than her fastest lap at San Diego. General started next but broke down and withdrew after the third run of her set of six. Frances Marion was similarly forced to withdraw when a connecting rod broke after she made two runs at a speed slightly higher than Janet's. Angeles I with Ralph Snoddy at the wheel and a supercharger fitted to her motor then proceeded to show what may be expected of 151 class boats in 1927. Her first run was done in 1:01. The second run put Angeles into the mile a minute class with a time of 58.5 seconds and the third run was made in the phenomenal time of 57.3 seconds. The times announced by the Hydroplane Association for the six runs made by Angeles and the corresponding speeds computed by the writer are:

Time for the mile	Speed in m.p.h.
1:01	59.02
0:58.5	61.55
0:57.3	62.83
1:01.1	58.92
1:01.5	58.54
1:00.5	59.50

Arithmetical mean of the speeds made on the six runs 60.06.

The Newport races were finished by a handicap event in which Angeles capsized on a turn. Snoddy fortunately was thrown clear and suffered no serious injury.

With Angeles doing better than 60 miles per hour in January it seems that 1927 may see 151 class boats making speeds that will eclipse those of the larger and even the unlimited classes of but a few years ago. San Diego looks forward with confidence to seeing some real speed at the regatta to be held on December 10 and 11. If plans now being formulated are successfully worked out the next regatta will include several of the larger classes in addition to the 151s. The owner of Miss San Diego II is said to be planning to install a new motor in his boat and rumor has it that the engine will be a Miller. Local racing men therefore are not only looking forward to seeing fine racing but to seeing a boat carrying their club flag up among the winners.

Regatta at Palm Beach

(Continued from page 49)

that she and Dick and Ralph were just out there playing around in the interests of slaying a bit of laggard time.

As usual the hydroplane events were run in five heats of five miles each—2½ miles to the lap—with cash and the famed Royal Poinciana and Elgin trophies as the bacon.

In the first heat, Miss California did the five miles in 7:22.3, making 3:38.3 in the first lap and 3:44 in the second. In this heat, Baby Peerless II was second with Chris Ripp of Jamaica, L. I., at the wheel. Peerless, which was the trim craft with a hull of quarter inch composition rubber, stepped the five miles in 7:57. Miss Spitfire VI, owned by J. H. Rand, Jr., of Buffalo, took third with a time of 9:03.2. Miss Rockledge, owned by George Gingras, Cocoa, Fla., and Margaret III, former world's champion, now owned by Henry U. Farnsworth, of West Palm Beach, also ran.

It was much the same throughout the next three heats, the one big exception being that Chris Ripp and the rubber hull innovation were out of it for good. It seems that the spunk of the water was too much and Baby Peerless II was left with a hole in her hull. And that, Chris said, would be that, so far as rubber hulls are concerned.

But to go on. In the second heat California made a total time of seven minutes flat, with Miss Rockledge taking second in 8:51.3, and Margaret, third, with a time of 11:48. In the third heat California was slower again, doing the five miles in 8:34.

(Continued on page 184)

1927 Hackercraft



The True Boat Lover Turns To Hacker

John L. Hacker has been for years the most copied boat designer in America. Time after time his new features have been adopted by other companies, often hastily between races. Among the boat-wise of the land, the genius of John L. Hacker stands out as the most advanced expression in boat building and design. That is why experienced yachtsmen prefer Hackercraft.

At the Hacker Boat Company's modern plant, an organization has been brought together which cannot be surpassed in all the boat building industry. The best energies of this organization have gone into the building of 1927 Hackercraft. In exhaustive trials, the 1927 DOLPHIN and DOLPHIN DE LUXE greatly exceeded anticipations, outdistancing all competitive boats that ran against them.

In each Hackercraft hidden things are as faithfully reproduced as are the details exposed to the eye. That is why, years after Hackercraft are bought, they can still be found faithfully performing. In your summer days on the water if you want to feel the consciousness of excellence, if you want to be envied by all, select a 1927 Hackercraft.

Write for our new booklet

Built by
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Direct all correspondence to
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Hacker & Fermann, Inc.
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Among the Many Distinctive Features of Hackercraft Are:

Indestructo-glass windshield. Elgin instrument panel. Spring upholstery. White metal deck hardware. Watertight collision bulkhead. Double plank bottoms. Goodrich rubber bearings. Parsons bronze strut and rudders. To insure absolute safety, heavy bronze plate in hull over propeller.

THE DOLPHIN

8 passenger, 33 miles per hour, equipped with Model F Special, 6 cyl. Marine motor. Price \$3450.

THE DOLPHIN DELUXE

8 passenger, 40 miles per hour, equipped with Model G, 6 cyl. Scripps Marine motor. Price \$4950.

Prices f. o. b. factory

Sold and Displayed by
JOHN WANAMAKER
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WALTER H. MORETON CORP.
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William E. Dodson owner of "SHADOW" Says

"The motor in every way is satisfactory and I will be glad to recommend it to anyone desiring power of this kind."

William E. Dodson

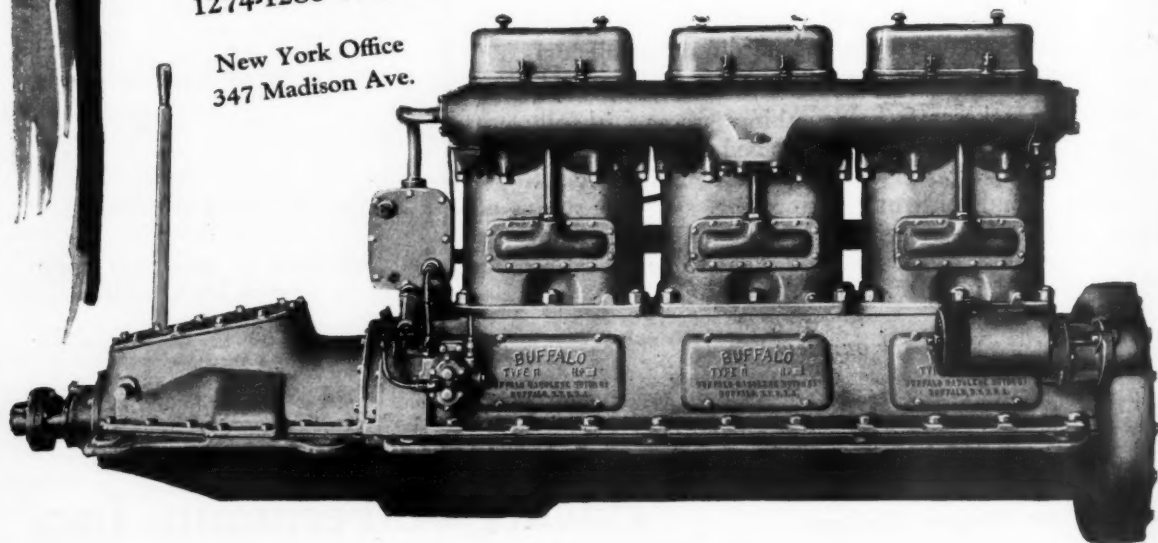
Shadow is powered with a Model "R" Buffalo, which enables her to cruise nicely at 14½ miles per hour or make up to 16 miles when more power is needed.

Buffalos are built in a wide variety of sizes. Tell us about your boat and let us suggest an engine to power it.

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1274-1286 Niagara St. Buffalo, N. Y.

New York Office
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Buffalo



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NO boat built today in its class is more admired and held in higher esteem than the Banfield Sea Skiff Cruiser. Safety at sea, the biggest and most important factor in any purchaser's mind, is accomplished in the De Luxe twin-screw cruisers so far and above other makes that the word Banfield stands out in a class of its own. Recently one of America's most famous Naval Architects pronounced the Banfield Sea Skiffs to be "the greatest sea boats of our times." The best known yachtsmen and sportsmen of our country own these famous boats, and through their deeds of prowess they have created a demand that has kept the building facilities of this organization taxed to its fullest capacity the year around. New buildings have been recently completed which doubles the output of these famous boats.

*Banfield Sea Skiffs are built in the
30-ft. Sailfish Model Cruisers and the
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Now! The Baby Banfield

9 Feet
\$225.00

F. O. B.
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A GENUINE Banfield Sea Skiff for your Yacht or Outboard Motor. The finest tender ever built, it will row and tow with ease and contains all the features of its famous daddy, such as speed and extreme seaworthiness. Built of cedar and mahogany, copper fastened, natural finish. Light in weight, easy to handle. Only a few of these boats available for spring delivery—orders should be placed promptly.

12 Feet
\$275.00

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BANFIELD SEA SKIFF WORKS INC.

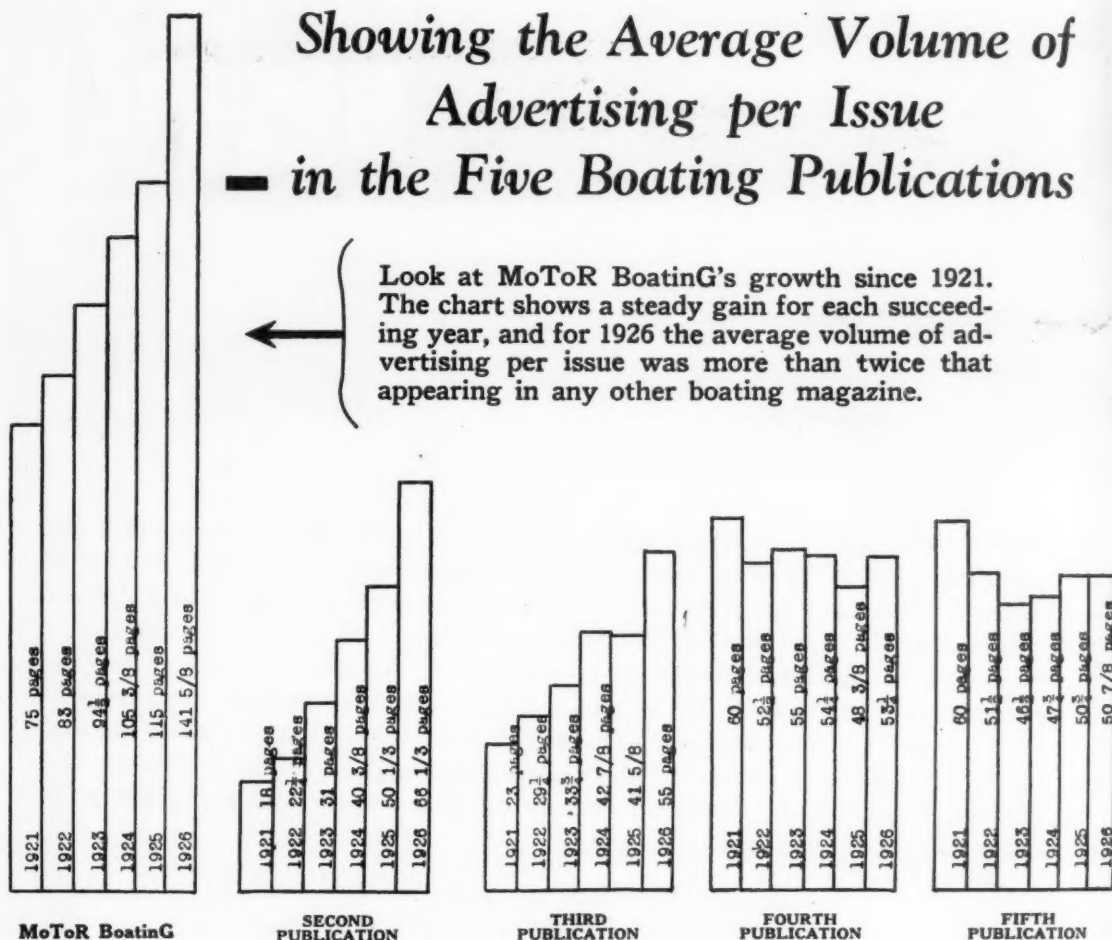
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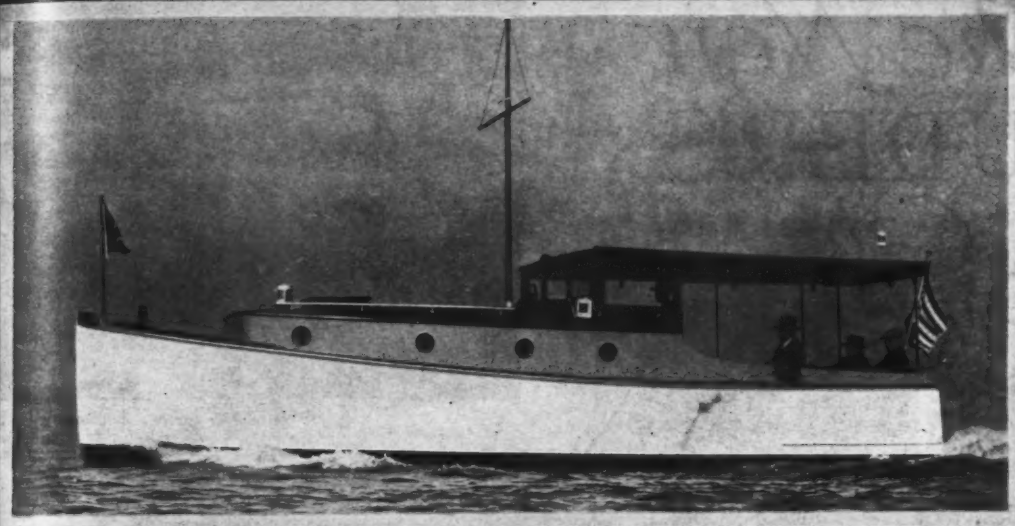
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MoToR BoatinG, 119 W. 40th Street, New York City

Advertising Index will be found on page 206



The MATTHEWS "28" Stock CRUISER

An OVERWHELMING public ACCEPTANCE greeted THE MATTHEWS "28"!!

"28"
Matthews

STOCK CRUISER

Length 28'-10"; Beam 10'; Draft 2'-10"; Headroom throughout 6'-1 1/4".

Salt water constructed throughout.

Individual sleeping accommodations for five. Complete toilet room; complete galley, separated from cabin; large mahogany dresser; large full length clothes closet. Complete equipment required by government and many extras.

Option of five motors 20 to 50 horsepower; speed 9 to 12 miles per hour. Cruising radius 250 miles.

Weight of boat approximately 10,000 pounds.

Price complete—\$4,350 afloat Port Clinton.

Shipment can be made by rail if desired.

The thought which prompted the designing, researching and building of the MATTHEWS "28" was one borne in the minds of boat lovers everywhere. For two years we were confronted with a demand for a smaller cruiser than the famous MATTHEWS "38" which, however, would provide unusual accommodations, be able and seaworthy, be a true product of THE MATTHEWS COMPANY (known for thirty-six years for the high character of fine pleasure craft they built) and yet be priced within reach of the great multitude of purses.

In announcing the MATTHEWS "28" shortly prior to the New York Motor Boat Show in January we were convinced we had supplied those several features which would be required in the boat and we had arranged for what we thought was a fair sized production program on the model for the first year.

An overwhelming public acceptance greeted the MATTHEWS "28". It has been necessary for us to revise our original production estimates—increase them exactly 50%. And now we find we are confronted with the probability that we will still be short of the demand.

It is entirely possible that with the necessity of our also increasing production this year on our five models of the famous MATTHEWS "38" we will not be able to again increase production on the MATTHEWS "28".

Take this note of warning seriously. If you contemplate having a MATTHEWS "38" or a MATTHEWS "28" for use this season make immediate arrangements with our distributor of Sales and Service nearest you or write us direct about a delivery date.

If you have not yet received literature describing our famous MATTHEWS "38" or our MATTHEWS "28" we shall be pleased to send it to you upon your request.

THE MATTHEWS COMPANY

Designers and Builders of Boats of Distinction—Since 1890

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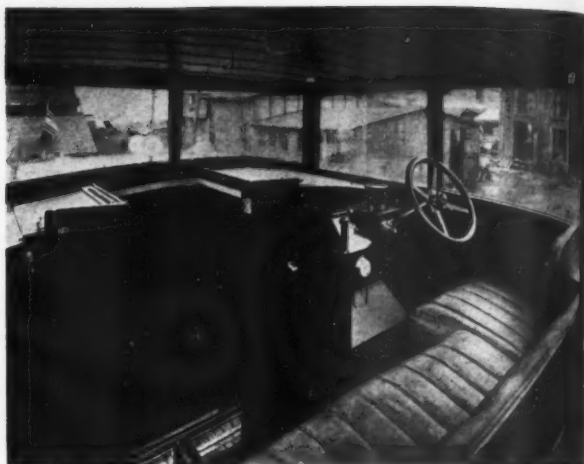
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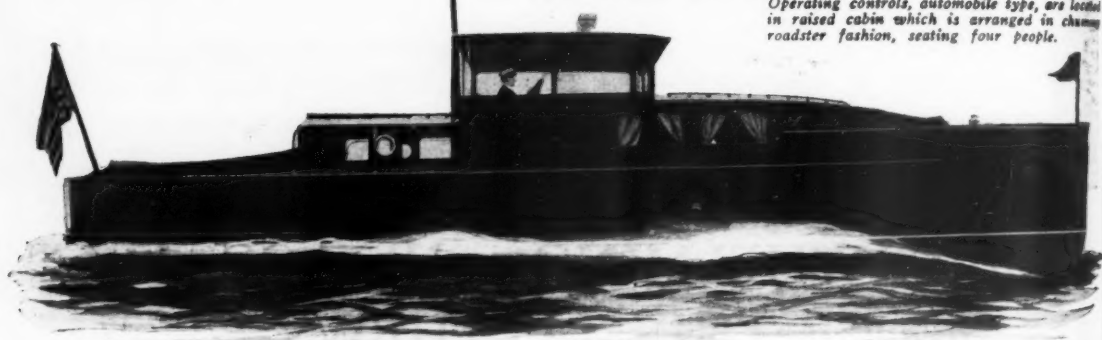
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212 So. Olive St., W. Palm Beach, Fla.

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The New LUDERS Cabin Runabout



Operating controls, automobile type, are located in raised cabin which is arranged in charming roadster fashion, seating four people.



Runabout Advantages

Plus Cruiser Comforts



Looking aft in main cabin. It is finished in mahogany and has two upper and two lower berths.

The power plant, a Sterling Dolphin, is installed in after cabin.

RIGHT: Looking forward in main cabin, showing companionway to forward cockpit.

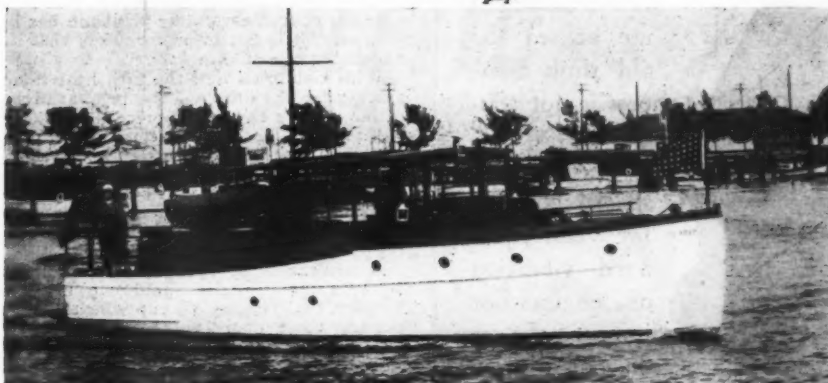


Resplendent with every appointment and refinement for comfortable cruising and ease of handling, the new Luders forty-two-foot cabin runabout is a pleasing combination of runabout advantages and cruiser comforts. The successful reception given this boat, the first standardized craft built by Luders whose reputation in custom built craft is esteemed throughout the yachting world, marks it as the greatest achievement in the stock boat field. Its graceful streamline design, speed, flawless finish and completeness of accommodations for day or over-night cruising fulfill the requirements of the most exacting boat buyer. Speed of 29 to 30 miles per hour is attained with the Sterling Dolphin marine engine, which is standard equipment.

Write today for full description and price
Luders Marine Construction Co.
 Stamford, Conn.



".....over 3,000 miles and all we have done to it (Buda GM-6) is to change the oil"



West Palm Beach,
Feb. 17th, 1927.

The Buda Company,
Harvey, Ill.

We highly recommend "The Buda Motor" which we have in our yacht, "The Lassen," which is a 42-ft. cruiser, 19 ft. 8 beam, drawing 3 1/4 ft., propeller 24 dia. and 18 in. pitch. We had a wonderful trip in our cruiser from Chicago to Miami making about 12 miles an hour. We have owned different makes of marine motors but the 100 H.P. Buda Motor cannot be beaten. So far we have cruised over 3,000 miles and all we have done to it is to change oil. You certainly have a wonderful motor and you should be proud of it.

Yours truly,

(Signed) C. T. LASSEN.

Buda Marine Engines Prove Their Superiority In Actual Service

MR. C. T. Lassen's experience with the Buda GM-6 100 H.P. marine engine which powers his 42-foot yacht, Lassen, built by Burger Bros. of Manitowoc, Wis., is not a surprise to us. Frankly, Buda engines are built to give years and thousands of miles of service without interruption, and at a minimum of cost. Other owners of Buda powered craft enjoy this same superlative service which prompted Mr. Lassen to write the unsolicited letter shown in the panel at the left. That is why so many boat builders recommend and use Buda power. In the famous Sea Sled Model-23 Buda is standard power equipment.

THREE MODELS

BM-4	BM-4-S	GM-6
50 to 80 H.P.	60 to 85 H.P.	70 to 100 H.P.

Write Today for Descriptive Bulletin

THE BUDA COMPANY, HARVEY, CHICAGO ILLINOIS

Established 1881

Buda Nation-wide Parts Service for Buda Marine Engines



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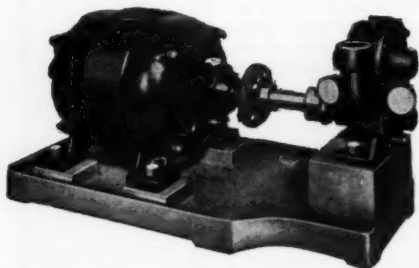


In these days of fast cruisers for use at sea the old time compass is not adequate.

We now have a special compass for this job, and vibration of engines or jump of the sea do not disturb the Card—which remains *Steady and Dead Beat*.

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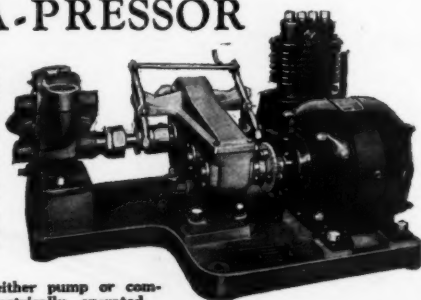


A direct connected pump unit having Hi-Duty Pump with double relief (patent applied for) making for quiet, economical and lasting operation. Two sizes, 5 gallons and 15 gallons per minute. 12, 32 or 110 volt motors.

Hi-Duty Pumps in sizes $\frac{3}{8}$ " to 1" are also furnished separately for all general pump uses.

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Also made with either pump or compressor only, electrically operated.

Write today for literature and prices

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259 GREENWICH ST.

NEW YORK, N. Y.

Regatta at Palm Beach

(Continued from page 176)

The fourth heat, which was the sunset state boat's last in competition, saw a good field in the lists. And California was ready for them. Loynes let her out until at the end of the five miles she was clocked at 6:25.3. Miss Westchester, E. W. Hammond of Larchmont, N. Y., ran second in 7:15.2; Miss Rockledge third, 9:18.2. Wasp, owned, by Elmer H. Johnson of Albany, N. Y., a ship with an odd hull, got into this heat and turned up fourth with a time of 10:38.4. Margaret III and Spitfire VI also ran.

The last heat was to be run on Tuesday, the final day of the meet. On Tuesday forenoon the mile time trials were to be run. Miss California, as we have said, entered and started on the six-lap grind. But in the second, she was so soundly smacked by the wake from a lumbering cruiser near the course, that three planks in her hull were shattered. However, it is not to be forgotten that in that first lap she negotiated the mile in 1:13.

With California out, the fifth heat came up more encouragingly for the others. The results: Miss Spitfire V, holder of the world's competitive record at 47.05 m. p. h., first, time 7:23.2; Miss Rockledge second, 9:07.2; Margaret III, third, and Miss Spitfire VI, fourth.

And so Miss California, the hope of the west, in spite of accident, fulfilled her trust and annexed the trophies, the cash and 800 points. So far as points go, Miss Rockledge was second in the money with 375 points; Miss Spitfire V, third, 200 points, and infinitum.

A while ago we spoke something about the freakish results in the 625 class gold cup chase for the Interstate Trophy, that famous old cup which men and boys have been chasing these many years since 1905.

To make a long story short, three boats entered the lists and raced for three days. When the fight was over each boat had annexed a first, second and a third place and each was tied with the other with a total of 1085 points. Now laugh that off!

And so Palm Beach Days, owned and driven by Commodore William McP. Bigelow of Easton, Md., and Alfred H. Wagg of Palm Beach; Miss Tampa, owned by Commodore Caesar F. Irsch of Davis Islands, Tampa; and Sara-de-Sota, driven by Captain Fred Blossom of that town, still have to settle.

The 625 competition on the Palm Beach calendar called for three heats of 25 miles each. The first day Sara-de-Sota annexed first place with a time of 31:19.2. She first took the lead from Palm Beach Days by a second in the fourth lap. Miss Tampa had been trailing, her engine acting faulty. In the fifth, Palm Beach Days regained her lead and took the lap by a fifth of a second but in the sixth her engines stopped and she lost approximately 20 seconds. For the remainder of the way, Sara-de-Sota and Palm Beach Days see-sawed back and forth, with odds of a fraction of a second here, or a second there. The result was that Sara-de-Sota took first in the heat, Palm Beach Days was second with 31:37.3, and Miss Tampa was third with a time of 33:53 for nine laps, having been flagged off in the tenth.

In the second day's workout, Palm Beach Days ran like a top, leading the field with a time of 32:32.3. Miss Tampa, slicked up considerably, ran in second in 35:25, and Sara, winner the day before, was forced to take last with a time for nine laps of 35:27. Like Miss Tampa, the day previously, Sara-de-Sota was flagged off this day in the tenth.

Then came the day which was to yield up victory for some one—instead of a tie for all, as it did. Of course, Miss Tampa took first in the heat with a time of 32:48.3, and of course, Sara-de-Sota got her second in 33:11 and, of course, Palm Beach Days took third with 49:29.3, but the big war was still far from finished.

If Palm Beach Days hadn't run into hard luck, though, this yarn would have been a different story. The trim craft, so daringly driven by Commodore Bigelow, with Commodore Wagg as mechanic, led the field this third day by a wholesome margin up to and through the fifth lap. Then a rudder cable snapped at a buoy. There was dire peril for a moment for Commodores Wagg and Bigelow. Palm Beach Days lost her lead. She was forced to make repairs. Her time for the six lap jumped to 8:27.3. Palm Beach Days re-entered in the seventh and fought valiantly but, of course, the odds were now too great to regain the lost time.

And of Miss Tampa? She had been trailing Palm Beach Days and Sara-de-Sota. But meanwhile Captain Otis Beard, driving, was forcing her on. Finally, in the ninth lap, Sara

(Continued on page 186)

WINTON

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ENGINES



"FROLIC II." Walter P. Chrysler, Owner. Designed by John H. Wells, Inc. Built by George Lawley & Son Corporation. Length, 70 feet. Beam, 12 feet, 6 inches. Draft, 4 feet. On trials this boat made better than 29 miles an hour; she maintains a cruising speed of 27 miles. Primarily of the day boat type, and used by Mr. Chrysler mostly for commuting between his home on Long Island and New York City. Powered with two Winton Gasoline Engines—total, 700 H. P.

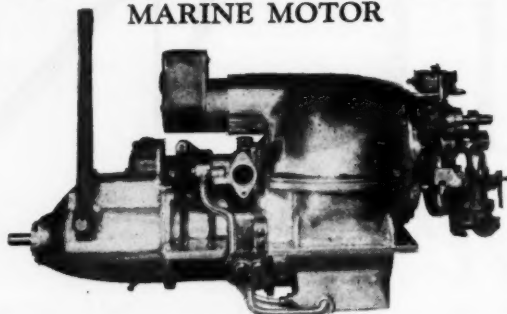
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For every marine requirement

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BESSEMER

Regatta at Palm Beach

(Continued from page 184)

shot a valve and Miss Tampa, coming like the wind, shot home to a finish—and a controversy.

One thing more is outstanding in the Fifth Annual Washington's Birthday Regatta of the Palm Beach Yacht Club this year. Commodore W. J. (Fingy) Conners of Buffalo and Palm Beach, attached his second leg to the Bradley Gold Challenge Cup when Captain L. M. Simmons drove the Conners boat, Miss Palm Beach, 25 miles in 35:02. The Commodore laid his first claim to the cup with Miss Palm Beach a year ago.

In the race this year Mrs. Conners again drove her Miss Okeechobee the full schedule, crossing the finish line only four seconds behind her husband's boat. J. M. Rutherford with Sneeze II, was third with a time of 36:07. One more year's win will give Commodore Conners permanent possession of the Bradley Cup, which will indeed be a distinction for not yet has one boat annexed the golden chalice.

It is beginning to appear that Commodore Conners and Loynes, from the golden west, may have distinction together for Loynes, as we have said, now needs but one more victory here to walk away with the Royal Poinciana trophy as a permanent proposition.

Thousands this year witnessed the regatta at Palm Beach and the events drew notables in yachtdom by the score. The brilliant three-day celebration, staged this year under the direction of Commodore D. H. Conkling and Captain J. D. Hess of Palm Beach, included a colorful Venetian Night celebration on Lake Worth, the annual ball, and the annual yachtsmen's dinner. Plans already are going forward for the sixth annual regatta next year.

Summary of Results, Fifth Annual Regatta Palm Beach Yacht Club, Lake Worth February 20-22, 1927

151 Class Hydroplanes—Five Heats of Five Miles

Boat	Owner	Time	Time	Time	Time	Time	Time	Time
Miss California	R. R. Loynes	7:22.6	7:00.0	8:34.0	6:25.6	—	—	—
Baby Peerless	Chris Ripp	7:57.0	—	—	—	—	—	—
Miss Spitfire	J. H. Rand	9:03.4	—	—	13:33.0	—	—	—
Miss Rockledge	G. Gingras	9:21.6	8:51.6	9:13.6	9:18.4	9:07.4	—	—
Margaret Third	H. U. Farnsworth	12:03.6	11:48.0	11:53.4	11:32.0	11:08.2	—	—
Miss Westchester	E. W. Hammond	—	—	—	7:15.4	—	—	—
Wasp	Elmer H. Johnson	—	—	—	10:38.8	—	—	—
Miss Spitfire V	Mrs. J. H. Rand	—	—	—	—	7:23.4	—	—

Fastest Heat, Miss California, 42.8 m.p.h.

Free-for-All Outboards—Two Heats—2 Miles Each Class B

Boat	Owner	Time	Time	Time
Crate	James Ohmer	8:47.6	8:47.0	—
Ooh-La-La	Waldo Thompson	12:03.6	8:45.0	—
	Jack Schaeffer	—	8:01.6	—
	Mr. Sutcliffe	—	9:19.6	—

Fastest heat, J. Schaeffer, 18.71 m.p.h.

Free-for-All Outboards—Three Heats—2 Miles Each Class C

Boat	Owner	Time	Time	Time	Time
Poison	D. H. Conkling, Jr.	6:53.0	8:52.6	7:15.2	—
Me II	L. P. Allen	6:55.4	7:13.4	6:55.0	—
Baby Bandit	H. Gingras	7:10.0	7:26.6	7:05.0	—
Black Diamond	C. H. Fay	7:35.6	7:26.0	7:09.8	—
White Diamond	C. H. Fay	7:40.4	7:19.8	7:23.6	—
Ketchme II	L. P. Allen	10:03.0	8:14.6	7:31.8	—
Sister St. Augustine	A. R. Knauer	—	—	7:31.8	—
Crate	J. Ohmer	—	9:26.0	7:31.8	—

Fastest heat, Poison, 21.89 m.p.h.

Gold Cup—625 Class—3 Heats, 25 Miles Each

Boat	Owner	1st Heat	2nd Heat	3rd Heat	Time
Sara-de-Sota	Fred Blossom	31:19.4	35:27.0	33:11.0	—
Palm Beach Days	A. H. Wagg & Wm. McP. Bigelow	31:37.6	32:32.6	40:29.6	—
Miss Tampa	C. F. Irsch	33:53.0	35:25.0	32:48.6	—

*Time for nine laps only.

Fastest heat, Sara-de-Sota, 47.8 m.p.h.

Sea Sleds—One Heat—Five Miles

Owner	Time
O. F. Woodward, Palm Beach	9:02.0
Geo. H. McKinlock, Palm Beach	9:31.0
Sea Sled Company, Palm Beach	9:53.0
Colonel B. Thompson, Palm Beach	10:16.0
Arthur Woodman, Palm Beach	13:50.0
J. D. Wooster-Lambert, Palm Beach	14:06.0

(Continued on page 192)

A Motor That Stirs Men's Sporting Blood

—Three Ways

1st Last year when the New L-A Twin (now called Lockwood) was announced, it was "the Dark Horse of the Outboard Motor Field." Within a few months, the world recognized that here was a "different" Motor—a Motor that actually occupied a field by itself—the first in a new high-speed class. It has stirred the sporting spirit of men to see this remarkable little Motor smash its way to nation-wide popularity in a single season.

2nd In innumerable races, Lockwood owners have accepted the challenge of other Motors—often those of higher power rating—and sportsmen everywhere have been won by its blood-stirring speed.

3rd On thousands of waters, Lockwood owners and their families are constantly experiencing the thrill of driving a Motor of hitherto unmatched performance and dependability.

Great as the L-A Twin was in 1926, we promise you still greater things from the Lockwood Twin for 1927.



LOCKWOOD BOAT MOTOR

—retains all the outstanding features of the L-A Twin, plus 15 New ones that mean much to you. For example, the "Lockwood Pilot"—the New Push Button Control—the Folding Steering Handle—the Larger and Heat-Shielded Gas Tank—the Water Guide on Stream Line—the New Positive Carburetor Control, etc. New-found power has been unloosed—new ways of getting extra boat-pushing efficiency have been discovered. We want you to have the facts about this New and Greater Lockwood Twin.

Write for FREE Catalog Folder

See for yourself how we have built for you a Motor that is "Again a year ahead." Remember, the Lockwood Twin is the proven Motor in the new high-speed class. Back of it is more than a year of proven performance, and more than 22 years of marine engine building experience.

Send for Free Folder today.

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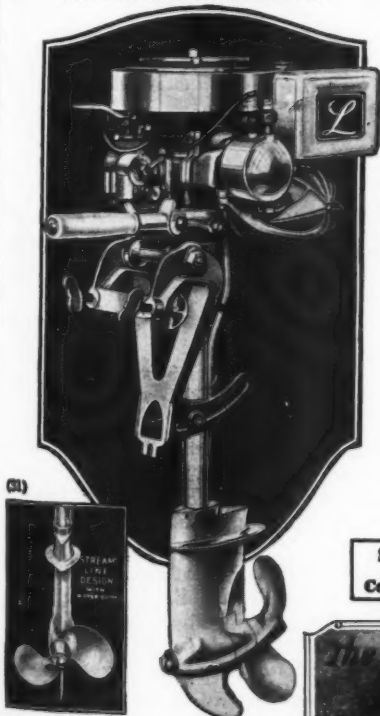
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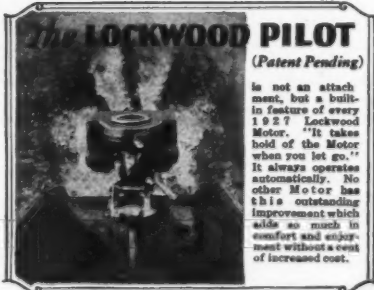
Gentlemen: Send me Free Catalog Folder, describing the 1927 Lockwood Twin and its 15 New Features.

Name.....

Address.....



C. J. Singleton, Birchwood, Wis., writes: "The Lockwood Twin is the 'humbler' of the outboard field; starts readily, develops almost incredible speed with practically no 'vibration.' It 'runs rings around' the other boats afloat. All you claim for it is right there, plus. After 15 years' experience operating outboard motors, I will say that this Lockwood Twin can be bought on its merits, and I have had them all. I am the pioneer..... to date. I got my money's worth this time."



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BOAT NAILS

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GALVANIZED
Heavily Coated
with
**Pure
Zinc**



Unretouched photograph shows heavy, pure zinc coating on Neverust Nails. Blunt point, round head, $\frac{3}{4}$ inch to 6 inch. Chisel point, round head, $\frac{3}{4}$ inch to 4 inch. Also galvanized boat rivets, fastenings, lag screws, carriage and machine bolts.

Guaranteed by this
Trade Mark.



TRADE MARK

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The large quantity of pure zinc used, coupled with the hot dipped method by which they are coated, produces galvanized iron nails in which you may place *absolute reliability*. No method of coating has survived the test of long, hard service like the hot dipped method, successfully used on Wilcox, Crittenden Marine Hardware for nearly seventy years.

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Est. 1847

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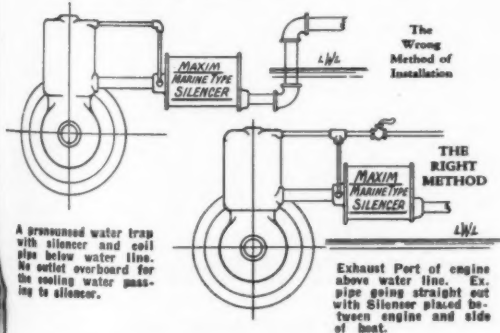


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Effectively stops exhaust noise without loss of power



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One of the several typical installations of the Maxim Silencer, Marine Type.

Highly efficient when properly installed

Trade Mark

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This Silencer effectively stops primary and secondary noises by whirling the exhaust gas through chambers and noiselessly discharging it. The Silencer is the invention of Mr. Hiram Maxim, and as manufactured by Wilcox, Crittenden & Co., it is well made and highly efficient.

Proper installation is necessary to derive the full benefit of the Silencer. It must fit the engine. If too large, some noise may escape. If too small, it may cause some back pressure. Various methods of right and wrong hook up are described in the Wilcox Maxim Marine Type Silencer folder. It will pay you to send for it.

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Old Man Joe

Look at the gear on your engine. Is it JOES? If it is, that means you can always get good service on it. Old Man Joe has been makin' gears for twenty years now, an', even though they're all over everywhere, he feels responsible for every one of them.

So, as a sort o' perpetual insurance policy to owners, he maintains

Service Stations in 30 Ports

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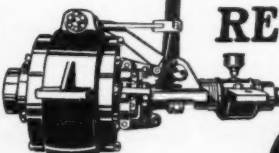
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Stroke 4 1/4"

Displacement 169.28 cu. in.

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Bore 3 1/4"
Stroke 4 1/4"

Displacement 195 cu. in.

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Bore 3 1/4"
Stroke 4 1/4"

Displacement 230.21 cu. in.

Model 252—6 Cylinder
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Stroke 5"

Displacement 331 cu. in.

Model 253—6 Cylinder
Bore 4 1/4"
Stroke 5 1/4"

Displacement 421 cu. in.

Model 254—6 Cylinder
Bore 4 1/2"
Stroke 5 1/4"

Displacement 548.69 cu. in.

Quiet - Sturdy
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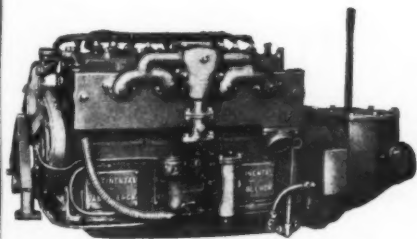
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An unusually close adherence to the strictest standards of workmanship and the unvarying use of quality materials in Continental-Van Blerck Motors results in that smooth and dependable performance so essential in the Marine field.

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Model 251—6 Cylinder
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Displacement 195 cubic inches.

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The FORD Powered Motor Boat

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J. B. ULER

SHOWROOM and SERVICE STATION:
 470 PASSAIC AVENUE KEARNY, N. J.

Regatta at Palm Beach

(Continued from page 186)

Baby Steppers Outboard—2 Heats—2 Miles Each Class C

Boat	Owner	Time First Heat	Time Second Heat	Points
Sister Palm Beach	A. R. Knauer	7:04.0	.....	20
Poison	D. H. Conklings, Jr.	7:05.8	.....	18
Sister St. Augustine	A. R. Knauer	7:08.0	6:42.0	16
Sister Miami	A. R. Knauer	7:13.4	6:23.6	14
Sister Tampa	E. J. Grady	7:22.0	6:47.0	12
White Diamond	C. H. Fay	7:38.0	.....	10
	A. R. Knauer	.....	7:58.0	8

Fastest heat, Sister Miami, 23.45 m.p.h.

Express Cruisers, Exhibition Race—5 Miles

Boat	Owner	Time	M.P.H.
Gar Wood, Sr., the II	Gar Wood	9:41.0	31.0

Baby Buzz Outboards—Class C—2 Heats, 2 Miles Each

Boat	Owner	Time First Heat	Time Second Heat	Points
Super Baby Buzz	Charles Barfield	10:33.4	8:06.4	20
Buzzing Around	B. Grogran	8:36.4	8:48.8	18
	O. Grogran	.....	8:50.6	16
Wow	W. Thomas	.....	9:04.8	14

Fastest Heat, Super Baby Buzz, 18.5 m.p.h.

Biscayne Babies—Two Heats—5 Miles Each

Owner	Time First Heat	Time Second Heat	Points
P. H. Prigg	7:46.4	7:49.8	400
R. H. Ward	7:57.0	8:03.6	200
C. R. Pease	7:58.0	8:07.4	100
Carl Fisher	8:11.8	.....	25

Fastest heat, P. H. Prigg, 38.6 m. p. h.

Super Bear Cats—5 Miles

Boat	Owner	Time	M.P.H.
Virbet II	A. Atwater Kent	9:32.0	31.50
Caroline	R. E. Oliver	9:37.4	31.20

Free-for-All Hydroplanes and Displacements—15 Miles

Boat	Owner	Time	M.P.H.
Miss Okeechobee	W. J. Conners	19:47.4	45.5
Sneeze Twice	J. M. Rutherford	22:22.8	40.2
Hydro Bullet	Earl Deakin	25:07.6	35.8
Number 12	Paul H. Prigg	28:36.4	31.50

Chris Craft—5 Miles

Boat	Owner	Time	M.P.H.
Alacrity	Kenneth B. Van Riper	9:05.2	33.0
Mary B.	R. E. Oliver	9:20.6	32.1
Number 12	Paul H. Prigg	9:33.6	31.4

151 Hydroplanes—Ladies' Exhibition—2 Miles

Boat	Owner	Time	M.P.H.
Miss Spitfire V	Mrs. J. H. Rand, Jr.	4:55.8	30.4

Dodge Water Car 5 Miles

Owner	Time	M.P.H.
George Albertson, Palm Beach	10:14.0	29.3
Jack Butler, Palm Beach	10:26.8	28.8
A. Andrews, Palm Beach	11:04.6	27.0
R. E. Oliver, Palm Beach	11:19.0	26.5

Bradley Gold Challenge Cup Race 25 Miles

Boat	Owner	Time	M.P.H.
Miss Palm Beach	Commodore W. J. Conners	35:05.4	42.5
Miss Okeechobee	Commodore W. J. Conners	35:09.8	42.4
Sneeze Twice	J. M. Rutherford	36:07.0	41.5

151 Class Hydroplanes—One Mile Trials

Boat & Owner	Time	M.P.H.
Miss California R. R. Loynes Made one lap out of six was forced out by injury to hull. Time for one lap 1:15		
Crate James Ohmer	3:23 3:20 3:25 3:14 3:26 3:10	32.0
Poison D. H. Conklings, Jr.	3:33.6 2:33.4 2:36.4 2:31.4 2:37 2:34.6	2:44.4
Sister Miami A. R. Knauer	2:29 2:18 2:26.4 2:18.8 2:26 2:21.4	2:23.2
Best speeds, Miss California, 49.35; Crate, 18.95; Poison, 23.7; Sister Miami, 26.1. Average speeds. Crate, 18.0; Poison, 21.8; Sister Miami, 25.1.		

Why

Boat Owners,
Naval Architects
and
Boat Builders

Prefer

KUHLS'

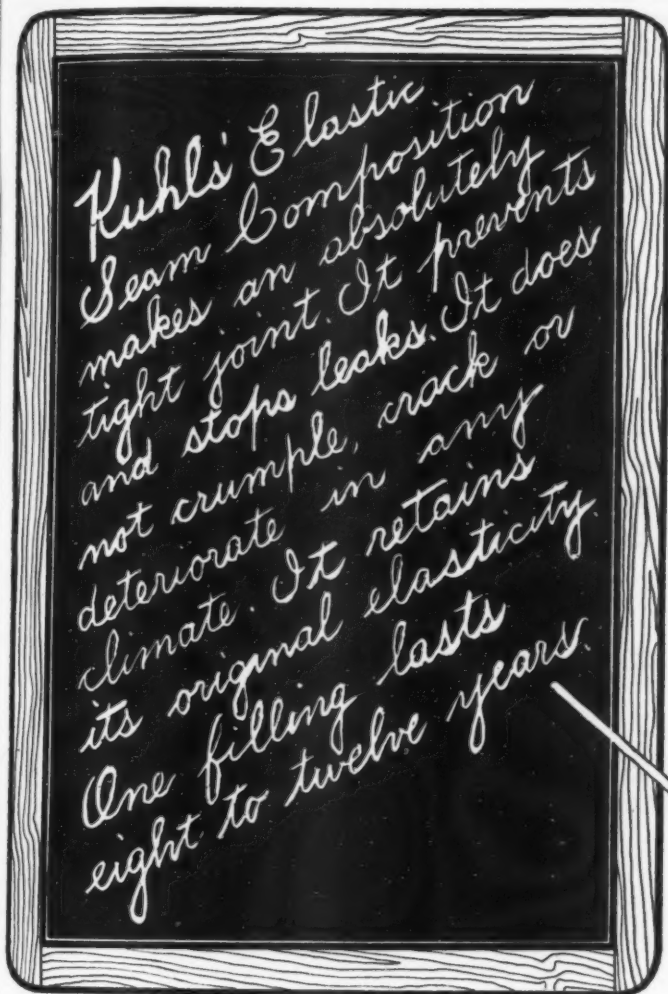
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ELASTIC
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Luxury with Speed

ANOTHER luxurious cruiser-houseboat is the "Ardea" designed and built by the Consolidated Ship-building Corporation, of New York, for Mr. Harry Darlington Jr., of Pittsburgh.

The "Ardea" is 81 feet long by 14 feet 6 inches beam, and the two Wright "Typhoon" Engines, giving a total of 1100 H. P., are housed in less than half the space which would be required for the more conventional marine engines of equal power output and they weigh only

about a third as much. "Ardea's" full throttle speed is 30 miles per hour, and on two-thirds throttle she maintains a comfortable cruising speed of 20 miles per hour.

Two full decks give ample room for the same comfortable living afforded by a large, luxurious houseboat.

This Cruiser-Houseboat type, as well as the popular 10-14 passenger, 60 mile per hour Commuting Run-about type, has been made possible by the outstanding performance of Wright "Typhoon" Engines.

WRIGHT AERONAUTICAL CORPORATION
Paterson, N. J., U. S. A.

**WRIGHT TYPHOON
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BULLETIN No. 10
 with interesting
 general information
 and technical
 description of
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 Engines will be
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Hand
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that works *twice as fast***

Radical innovations in the design of this windlass enable you to weigh anchor twice as fast as has been possible with any hand windlass ever before manufactured and without increased effort.

Both strokes of the lever lift the anchor instead of only one, while high mechanical efficiency makes the windlass easy to operate.

A single lever controls all operations of weighing anchor, letting go the anchor and braking.

Its power, speed, compactness and sturdiness make this the best hand windlass on the market for equivalent duty. The best materials and workmanship are used in its construction. The exterior is handsomely finished with liberal bronze trim. Large grease pockets are provided over the main shaft bearing, rocking gear segments and gear pinion.

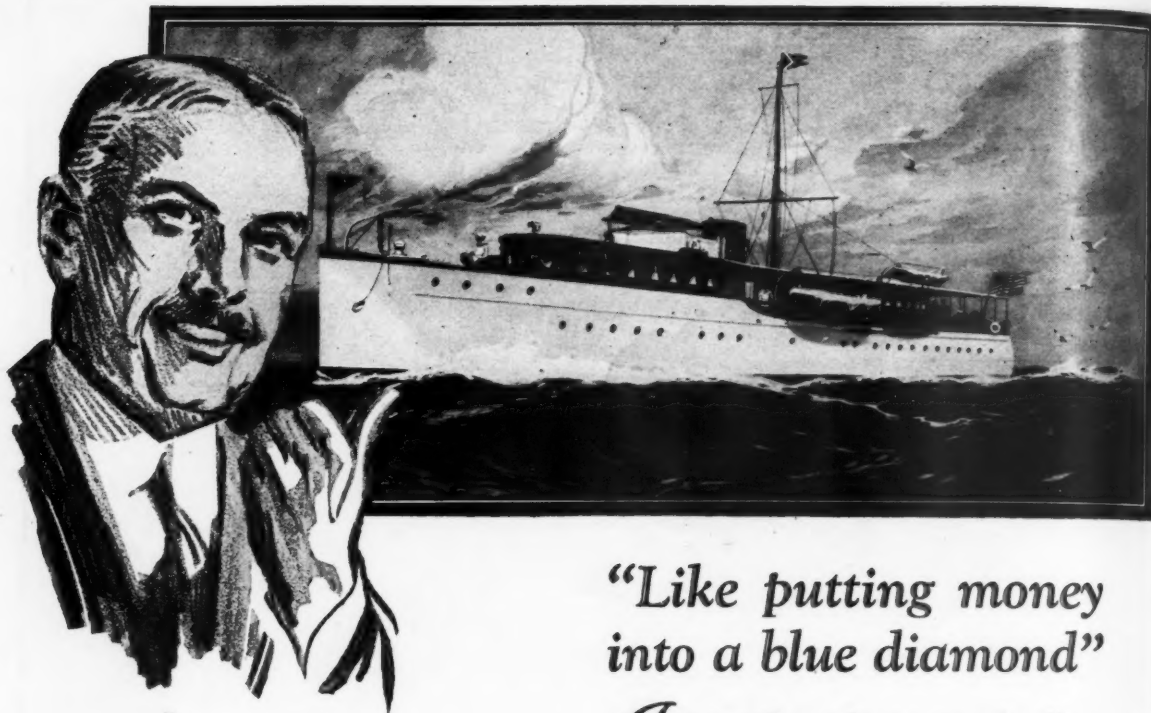
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*The Boat
Broker Says*

"Like putting money into a blue diamond"

I HAVE been buying and selling boats all my life, and there's just one bit of advice I always give—whatever kind of a boat you buy, choose a CONSOLIDATED.

Buying a Consolidated model is like putting your money into a blue diamond. It is sure to give satisfaction as long as you have it, and equally certain to command a good price should you want to dispose of it.

Consolidated-built boats bring good money whenever put on the market.

Consolidated yachts are designed, built, powered and fully equipped by Consolidated—the largest makers of pleasure boats and their propelling machinery in the world.

Details of any size or type of boat will be gladly furnished on request—yacht tenders, day cruisers, commuters, yachts.

We shall be glad to send you full details in regard to a Playboat which we have ready for immediate delivery; or any information you may desire on our larger boats, outfitting, repairs or repowering.

Consolidated Shipbuilding Corp.

Morris Heights

New York

Makers of Yachts and Speedway Engines

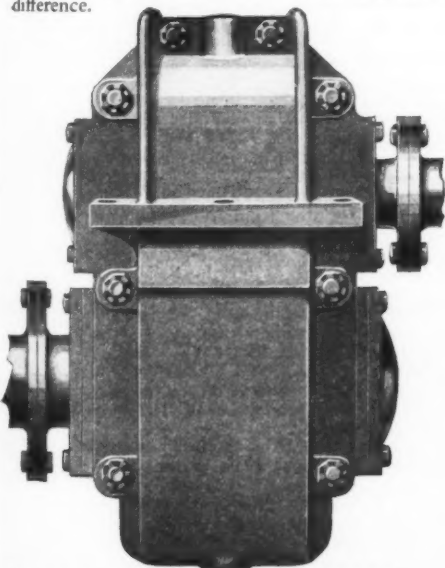


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ESTABLISHED 1898
PRODUCTS



CROSS OIL COOLER

A NEGLECTED motor materially adds to the cost of every mile you get from it. Protect it through perfect lubrication. A Cross Oil Cooler is the guardian of motor efficiency. It returns the oil at a temperature that is just right—cool, efficient and rejuvenated. What it saves through its "Minimum-evaporating" feature more than pays for its installation. Put one in and note the difference.



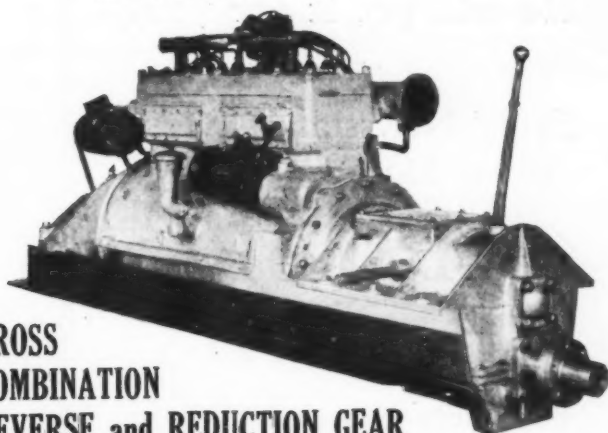
CROSS REDUCTION GEAR

THIS is the gear that solved the problem of reducing the revolutions of the propeller and at the same time increasing the torque so that the engine will turn a wheel sufficiently large to properly drive the boat. A sound-proof case, hardened and lapped gears, ball bearings throughout, thrust bearing included, operated on fluid oil—just a few of the many refinements that go with Cross Products.



CROSS BALL BEARING REVERSE GEAR

EXTRA short and compact which makes it the ideal installation where room is at a premium. Especially effective in forward cockpits. Oiltight housing—ball bearings throughout—a clutch like velvet—gears run in oil. Total absence of propeller drag—85% speed in reverse. Parts interchangeable and easily accessible. In four sizes for all H.P.s.



CROSS COMBINATION REVERSE and REDUCTION GEAR

PROVIDES a very fine means of adapting the automotive type engine to the marine field, in that it supplies in one housing a reverse and reduction gear, which can be adapted to any standard S. A. E. bell housing, such as will be found in Continental, Hudson, Wisconsin, Chrysler, Buda or Milwaukee, etc. The unit is very light in weight and very rigid in construction and is mounted on ball bearings throughout, and provision is made for use of two different oils, one for the Reverse Gear and the other for the Reduction Gear, so that suitable lubrication can be chosen for each unit.

Very easy to mount and takes up but very little more room than an ordinary Reverse Gear requires. It permits the use of heavy, slow-turning propellers which are necessary to properly drive boats of the cruiser type. It has a built-in thrust bearing, amply large to take care of the heavy thrust loads obtainable in such large propellers.

Write today for further information

Cross Gear & Engine Company

3260 Bellevue Avenue, Detroit, Mich., U. S. A.

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But Every Newsdealer Wants
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**If You Can't Get it
Write the Editor.**

*This advertisement is in response
to the many inquiries as to where
MoToR BoatinG is on sale.*

Solving the Baggage Problem

(Continued from page 35)

that none of them will carry a motor complete and ready for use. In order to pack the motor in such a container it must be disassembled more or less. That feature involves a lot of mechanical puttering, and more bother, and fuss, and loss of time when the motor is set up for use again.

After trying out various and sundry methods of shipping outboard motors on trips around the country, and finding none of them thoroughly satisfactory, I decided to solve the problem once and for all. I'd paid out a lot of money for express, and had shipped outboard motors in boxes, by express, freight, and what not. The net result of my effort to secure a suitable container for handling an outboard motor as baggage is the trunk shown in the accompanying photographs.

First of all, I went and bought a good trunk of the dress trunk type. My experience with trunks has taught me that there is no poorer investment than a cheap trunk. A few short trips, and any cheap trunk is done. A dozen cheap trunks will be hopelessly wrecked while one good one will last indefinitely. So, the trunk I bought was a good one—an article built by the Wheary Trunk Company, of Racine, Wisconsin, a concern that claims they know how to build trunks that no ordinary baggage smasher can smash. Of course, such a trunk costs some money, but I'd figured the thing out that one good trunk would outlast about six cheap ones, so that in the long run the good trunk is the best investment.

I was careful to select a trunk with inside dimensions that were ample to take an Evinrude Sport Twin Outboard Motor without any dismantling other than the removal of the steering handle—a job that involves loosening one screw. I cared nothing about fancy tills, or other gee-gaws, and put most of the purchase price into trunk itself. Strength and rigidity were the prime considerations.

Into this trunk I built the assembly of oak partitions and motor blockings shown in the accompanying photographs. The motor fits into this, and nests tight—removing nothing but the steering handle. The construction arrangement supports the motor against rubber pads in contact with the ends of the two cylinders, and the top of the flywheel. It is securely fastened to a removable oak cross member by the same screw clamps that ordinarily hold the motor on the stern of a boat. A slotted oak block on the bottom of the trunk takes the end of the propeller shaft and holds it immovable.

With this arrangement there is no fuss or feathers about packing the motor. It goes in virtually as a unit, and without any coaxing or squeezing. The cross member is put in place and the screw clamps turned down upon it. The motor is then securely locked into position, and will remain so short of the trunk being actually broken away from around it. In removing the motor from the trunk it is only necessary to loosen the screw clamps, slide the cross member out of its slotted supports, and lift the motor out. The motor is then ready for service except for the half minute job of attaching the steering handle.

To gain additional strength, and provide convenient packing places for tools and other equipment, an oak partition is built down the length of the trunk. With this arrangement all motor duffle, tools, and an average camping outfit, fishing tackle, etc., can be packed in the bottom of the trunk alongside the motor. The regular till is then available for clothing and lighter articles.

All wooden fittings of this assembly are made of clear straight-grained oak. These are secured to the walls of the trunk with brass bolts—roundheads outside, and riveted and soldered on the inside. The cost of assembling this shipping trunk, aside from the trunk itself, and the builder's labor, was about \$6.00 for wood and hardware. This cost, however, including that of the trunk will soon be made up by avoiding the usual express charges for shipping a motor while on trips afield.

Cady's Fly Wheel Magneto

One of the first manufacturers of engines which are not in the outboard motor class to adopt a fly wheel magneto for ignition, is the C. N. Cady Company of Canastota, N. Y. They have constructed a small engine, and is light in weight, and which can be installed in any light craft which develops a full 2 h.p., on a bore and stroke of 3 by 2½ inches. It is arranged to start with a rope starter like the outboard engines, and this method is ideal for starting small engines. The Evinrude inboard engines in both the one and two cylinder sizes also use a similar ignition system.

A Lifetime of Troubleproof Pump Service

IN selecting equipment for motor yachts of any size, the qualities of durability, efficiency and freedom from annoying breakdowns should be the first consideration. This is particularly true of all pump equipment used on boats designed for off-shore service.

Nash Hytor

Centrifugal Pumps for Motor Yachts



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The Hytor trade mark illustrates aptly the unique design and construction that gives Nash Pumps many important advantages over other types of pump design.

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IN many fields, Nash Hytor Pumps are the accepted standard for quality and efficiency. Not only because they embody the finest materials and workmanship but because their exclusive patented design produces several unusual features that cannot be duplicated in any other type of pump.

Naval architects and engineers find a complete solution for the pump question when they specify the Nash Hytor for a majority of the pump requirements in their plans. If you have a pump problem, or if you are not thoroughly familiar with the principles of Hytor operation, you will find it worth while to take up the matter with us.

Complete data on request

NASH ENGINEERING COMPANY

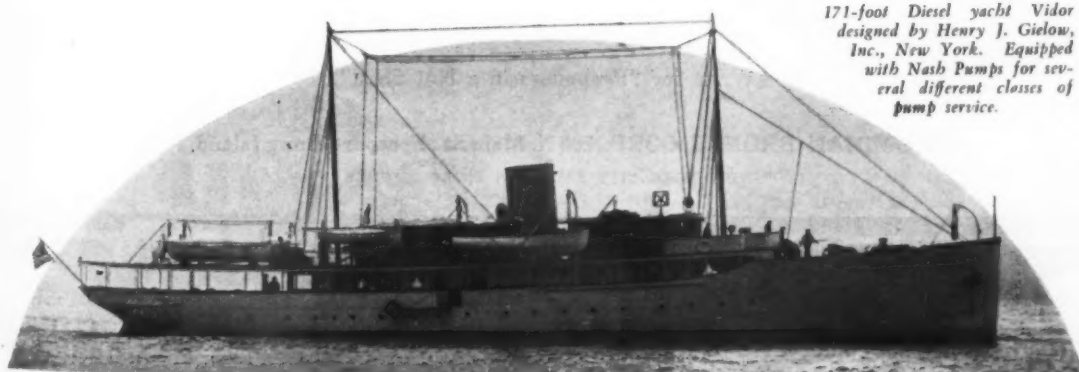
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171-foot Diesel yacht Vidor
designed by Henry J. Gielow,
Inc., New York. Equipped
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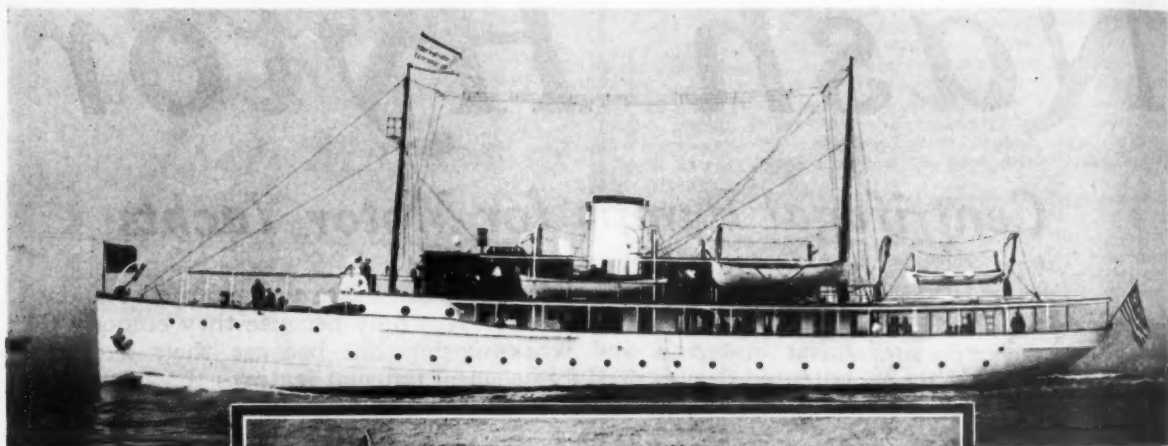


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*or from ocean liner to fishing smack—no matter how large
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Advertising Index will be found on page 206



The Sand Dab—"Everybody's Boat"


... everybody likes the Sand Dab . . . it's full of life . . . and the carefree spirit to go anywhere any time! It's right at home on stream or sea, carrying nine passengers with comfort and safety! In original and upkeep costs, the Sand Dab is well within your means! Buy your Sand Dab now . . . it's ready for immediate delivery . . . completely equipped as you'd want it!

The Dunphy Sand Dab

Salt water equipped. Shallow draft tunnel stern. Length—18 feet. Runs in eleven inches of water. Beaches anywhere—the propeller is protected. Ample room for nine passengers. Hull is cedar planked, brass and copper fastened, mahogany finished. Equipped with 4-cylinder 15 H.P. Universal Motor with electric starter. Maker 15 miles per hour. (Windshield and automobile top optional equipment.) Ready for immediate delivery—\$1275.00 F.O.B. Eau Claire.

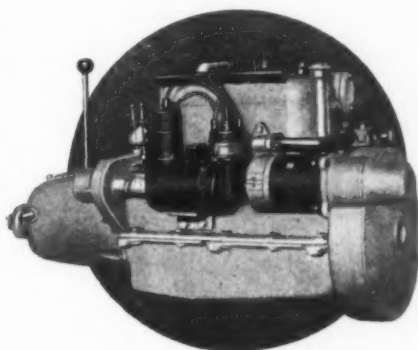
Dunphy Standardized Runabouts, 21-foot and 26-foot models are also ready for immediate delivery. Write now for catalog with complete information, prices and specifications on all Dunphy Boats—launches, outboard motor boats, canoes and row boats. Dunphy is a name that has been famous on lakes, rivers and ocean ports for more than forty years.

DUNPHY BOAT MFG. CO., Dept. C-4, Eau Claire, Wis.

DUNPHY
"famous  for forty
for boats years!"

The Universal Flexifour, 10-15 H.P. Marine Motor is standard equipment in the Sand Dab.

Auto-type starting and steering. Every bit as easy to start, quick on the throttle and dependable as the motor in your car. It provides wonderful smoothness from trolling gait to full speed. Full of power.



We are equipped to design and build any type of boat for your special purposes. Just send your specifications. Dunphy is your assurance of true craftsmanship.

THE NEW MIAMI BEACH TROPHY

for
Southern Free-for-All Championship



Designed and Made by
J. E. CALDWELL & CO.
PHILADELPHIA

Also Makers of Many Other
American Power Boat Trophies

Yard & Shop

(Continued from page 85)

A Contrast in Racing Boats

Hardly anything could be further from the modern conception of a racing boat than the 37-foot runabout, Horace, which, curiously enough, had a very successful racing season during 1926. This beautiful craft, probably the world's most luxurious runabout, was designed by George F. Crouch and built late last summer by the Horace E. Dodge Boat Works of Detroit, for Mrs. Hugh Dillman, mother of Horace E. Dodge. In every way Horace is a most remarkable boat and presents an unusual combination of luxury with very high racing abilities, her speed on a straightaway being 58 miles an hour.

The recent action of the American Power Boat Association in changing the rules of the Gold Cup and other races to allow the once-forbidden hydroplanes is a direct result of the extreme manner in which naval architects have interpreted the racing rules. These rules, of course, were aimed to produce racing craft which would present comfort, service and seaworthiness as to be of use for other purposes. But lightness of construction in both hulls and power plants has been carried to such a point that in no races of any length do half the starters finish. Freeboard and seaworthy qualities have been cut so far under the safe limits that it is a feat to drive some of the modern racers through the wash of competing boats even on the calmest days.

Horace is a perfect example of what can be done toward reconciling, in the same boat, the sport of racing and the thousand other purposes to which a modern runabout is put. She is heavily built, has liberal freeboard and luxurious seating accommodations for twelve passengers. Her power plant, a twelve-cylinder Wright-Typhoon motor of 650 horsepower, made by the Wright Aeronautical Corporation, is placed just aft of amidship with passenger cockpits forward and aft of the motor compartment.

Just behind the forward cross seat in the forward cockpit is a mahogany cowl covering spacious lockers and below the lockers there is ample room for the stowage of the many life preservers needed on a boat of this carrying capacity. As the boat will be used on long runs, over 200 gallons of gasoline can be carried in the heavy cylindrical copper tanks which are placed under the fore and after decks.

Horace was launched two days before the Sweepstakes race at Detroit and made a splendid showing, running with the greatest ease in the rough water which slowed down the extreme racers until she met with a minor accident which put her out of the race. After a bit of tuning up she raced on the Potomac in the National Motorboat Regatta, taking second place in the race for the President's Cup. The same day she won the championship of the Potomac River, defeating Miss Okeechobee by 6½ second over a six mile course. But what held the attention of everyone at Washington, what interested the officers of the Navy and the Coast Guard, was to see her before the races, between heats, and after the races, tearing around filled with passengers, her Typhoon motor always ready and willing to run as long as anyone cared to drive her, a striking contrast to any boat seen on any race course during 1926.

Evinrude Absorbs Koban

Word has been received that the entire stock and other assets of the Koban Manufacturing Company, builders of outboard and inboard engines, has been taken over by the Evinrude Motor Company of Milwaukee. The entire facilities of the Evinrude Company will now be at the disposal of Koban motor owners, and orders for parts, motors, and service, will be taken care of promptly. A large number of the Koban employees who are thoroughly familiar with these products, have been taken over by the Evinrude Company, so that Koban owners will secure prompt and efficient service.

Some New Books

Captain E. Armitage McCann who prepared the articles which appeared in *MoToR Boating* a few months back on building a model motor boat, is also the author of some very fine books called *Ship Model Making*, which have been published in two volumes. The first of these covers the construction of a Barbary Pirate Felucca and a Spanish Galleon, while the second volume gives complete information for the construction of a model of an American Clipper Ship. Both of these books are thoroughly illustrated and everyone interested in model boat building should have copies. Another book published recently is the *Plan Book of Cruisers, Runabouts, Auxiliaries and Outboard Motor Boats*, containing eighteen different designs for new and modern boats. This book, together with those on *Ship Model Building*, can be secured from *MoToR Boating* directly.

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